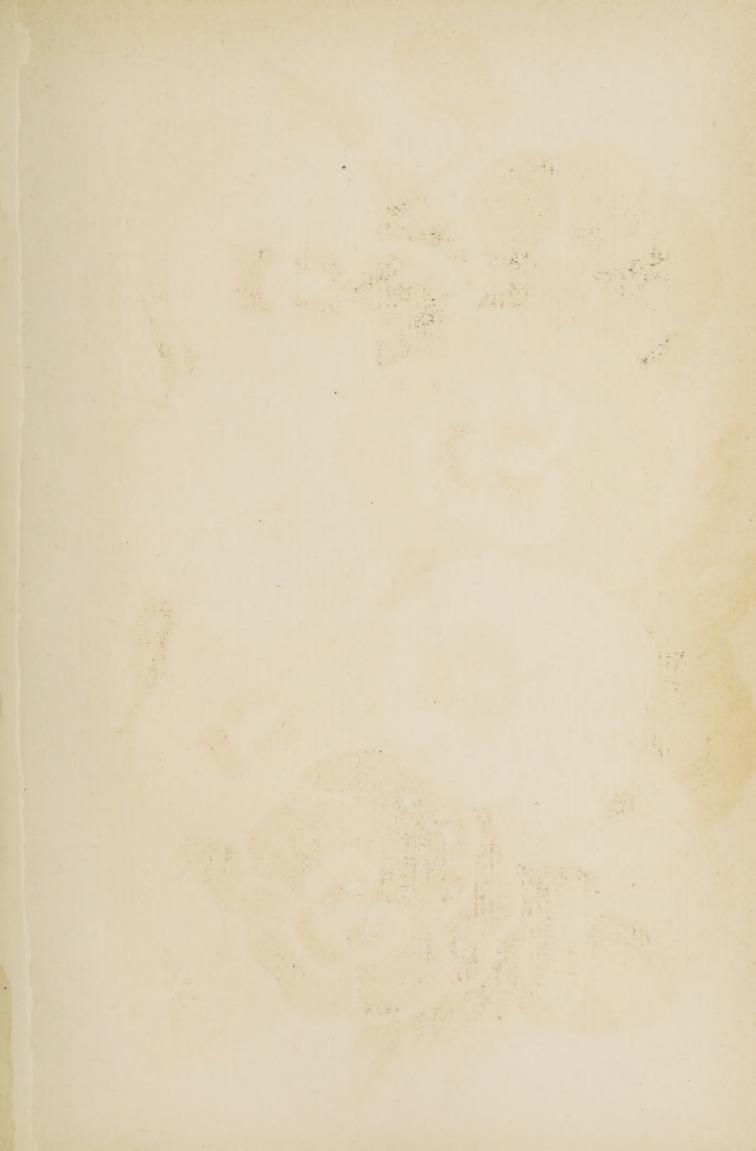
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Jours, L., Lames Crek.



AUGUST, 1881.

WE HAVE REACHED MIDSUMMER, the sultry summer heat when every one who can devotes a few days to rest and recreation, and all, whether at home or away, feel that there is little to do and little inclination to do even that little. All nature, too, is in sympathy with humanity, for the summer's growth is generally done, or finishing up quite leisurely. The lawn will scarcely need cutting during the month, while, in the activity of spring, the lawn-mower scarcely had a day of rest. Even the weeds are quiet and trouble us no more. The trees have completed their growth, and leaves and branches are slowly ripening, the former for their fall, the latter to rest securely during the frosts and storms of winter. The fruits are ripening and giving us the just reward of our forethought and toil. What we have sown we now reap.

The cows in the pasture quietly rest in the shade, and the brook, so active and fretful and noisy in the spring, is confined to its bed with scarcely a wrinkle upon its face, save when a trout musters courage to make a spring at some lazy insect, which seems to have lost all animation and is apparently indifferent as to its fate. Everything is in the fullness of maturity. The annuals are now the charm of the garden —the Asters and Phlox so brilliant as to rob the bedding plants of much of their former glory. The tall spikes of the Gladiolus are at their best, seem to enjoy our fiercest summer heat and command the attention of every one. The Japan Lilies are beginning to show that their season is approaching its end, while the Dahlias

are giving only a flower or two, just to remind us of what they intend to do in the cool nights and showers of autumn, for which they are quietly waiting. The Pansies are quite afflicted at the heat and dryness, and, like the Dahlias, await the approach of autumn, when they will show their thankfulness by larger and brighter flowers.

If a few weeks at pasture is a good thing for a favorite horse, why not for his owner? A little recreation, a few days rest to us mortals, is not necessarily wasted time, and, if properly improved, may bring blessings to both body and mind and heart. This is more and more appreciated by our people, hence, our summer resorts are becoming more desirable every year. Each section has its favorite resort, and many are truly charming. A few years since these places were for the fast and fashionable, and he who sought for good company, pleasant accommodations, and something like home comfort. returned sadly disappointed. Now, with a little care in the selection, pleasant and safe excursions can be had by land and water, and pleasant resorts found by sea, or lake, or river, or mountain-top, where every reasonable want can be satisfied, and summer homes secured, without the least annoyance to the ladies and children, for whose benefit these excursions are mainly made. Of late years, indeed, many of our summer resorts have partaken somewhat of a religious and literary character, where valuable moral, religious, and scientific instruction is imparted in the most charming way imaginable, in pleasant groves and tents. Foremost among

these is Fair Point, at Chautauqua Lake, for which text-books are printed, regular courses of study adopted, and diplomas awarded to the successful students by the Professor of this college in the woods. We hear of the Chautauqua course of study all over the land.

Many who live in the interior usually prize a visit to the sea-side for the benefit of sea-air and bathing; those on the sea-coast prefer our inland lakes and mountain scenery, while still others seek quiet places nearer home, but nearly all seem to seek the waters of the rivers and



RICHFIELD SPRINGS.

lakes, or cooling springs. Some of our readers the present summer, no doubt, will be compelled by business or other reasons to remain at home, but those who have tasteful and quiet homes in the country, will have little cause to complain. These, however, can enjoy reading of pleasant places, and philosophers tell us, not without reason, that the highest happiness is derived from seeing and making others happy. For the benefit of those who stay at home, and for the good of all our readers, and as an acknowledgement of thanks to thousands of subscribers, both new and old, we present our readers with an extra Midsummer Number, much larger than usual, and a little different in character. We had hoped to visit many American summer places this season, but when this number of the MAGAZINE is before our readers, we shall be among the gardens and parks of Europe, about which we hope to give some information in future numbers.

RICHFIELD SPRINGS.

One of the most charming resorts for both pleasure-seekers and invalids is the Richfield Springs, in Otsego County, N. Y. For many years these have been celebrated all over the country, but were never so popular, and certainly never more desirable than at present. The village is one of the pleasantest in the country, 1700 feet above the level of the sea, and sheltered by hills on three sides. The scenery is varied, the drives superb, and almost every point is rendered classic by association

with early American history. These things, in connection with the health-giving waters have caused this place to be known as the "Paradise of Invalids." The grounds are tastefully arranged and beautified with beds of flowers, that make the sojourner feel that he is at a home of refinement. For several years we have been commissioned by the liberal proprietor to adorn these grounds with flowers,. and if it is not well done we alone are to blame. think, however, the lovers of floral beauty will feel fully satisfied with the arrangement. These springs are about forty, miles from Utica and seventy from Albany. Our engraving shows a small portion of the grounds of the Spring House. Otsego Lake is reached by a pleasant drive of six miles,

and the readers of COOPER will remember this as the "Glimmerglass" of COOPER's Deerslayer, and a coach leaves the Springs three times each day for the lake, connecting with a steamer at its head for an enjoyable ride upon its waters. To those who indulge in fishing, this region affords peculiar attractions. There are plenty of trout-brooks in the neighborhood, and still-fishing in the lake is at all times good.

THE GREAT LAKES.

It is hardly possible to conceive of a more pleasant journey, with so much to enjoy and so little to endure, than that from Buffalo, through the lakes—Erie, Huron, and Superior—to Duluth, or, if more convenient, from the St. Lawrence River and Lake Ontario to the same place. The air is delightfully cool in that northern region, even in the hottest summer weather, and the accommodations all that can be desired. The first part of the journey is en-



GRAND PORTAL. PICTURED ROCKS.

livened by calls at Erie, Cleveland, and Detroit, while the Detroit, St. Clair, and St. Mary rivers, with their green banks, are a never to be forgotten memory. It is, however, when the largest sheet of fresh water in the world is reached, Lake Superior, that the scenery becomes astonishingly bold and picturesque, and the tourist feels that he is almost in a new world, the like of which he had never before dreamed. For the purpose of showing something of the character of portions of this region, we give two engravings of what are

called the Pictured Rocks, a series of sandstone bluffs extending along the shore of Lake Superior for some five miles, and take their name from the great diversity of colors they display. These rocky cliffs are worn into strange shapes, grottoes and caves, and one prominent point is called the Empress of the Lake, because, in moonlight, a female face is to be plainly seen, which is modestly concealed in daylight. The Lake Superior Transit Company, whose office is in Buffalo, furnish everything desirable for this journey.



EMPRESS OF THE LAKE.

We would suggest to our readers that, in their journeyings among inland waters, they examine with some care the beautiful aquatic plants that may be found in abundance, such as the Water Lilies, Callas, Iris, &c. Many persons possess on their own grounds points where several of these could be introduced. Water is introduced into many of the best gardens of Europe with fine effect, some specimens of which we have already presented to the notice of our readers. We now give a garden cascade and artificial water with rocks, for which we are indebted to the London Garden. On this subject and its ally, that of fish culture, we have received the following communication

which can be beautified by the construction of little artificial lakelets, but most owners of such sites are reluctant to devote them to such purposes, as it deprives them of just so much pasture, meadow, or tillable land, as the case may be. Now, I wish to say to such people that, in most cases, the areas can, at small cost, be made far more valuable when covered with water than by any known method of cultivation, and this without detracting in the least from their beauty as ornamental features of the landscape. I allude to 'Carp culture.' The culture of the European food carp is becoming the most important, as it is already the most rapidly increasing industry in this country. As



A GARDEN CASCADE.

from MILTON P. PIERCE, the editor of the Wenonah Advance, of Wenonah, N. J., who is connected with the Aquedale Carp Ponds of that place:

"Friend Vick:—I always find articles of special interest to me in every issue of the Magazine. The one entitled "Beautiful Rural Homes" and illustrated by a "Quiet Water scene," in the June number, is one of those which should commend itself to not only rural readers, but to all whose locations admit of inexpensive embellishment. There is nothing in this line so attractive, and even fascinating, as water scenery. There are, in almost every neighborhood outside the prairie regions, sites

population increases, grazing and meadow areas become more restricted from year to year, as these areas are required for active tillage. The consequence is, that "butchers' meats" are dearer, and must continue to demand high prices, even though all other food supplies are very low in price. When we consider that fresh fish of the high quality of the food carp is nearly equal in nutritious elements to butchers' meats, it is not surprising that some four thousand persons have, within a year or so past, applied for small stocks of carp, in order to commence their culture for purposes of food supply purely. Nearly all inland waters of this country are adapted to their culture, pro-

viding they are secured in the form of specially prepared ponds. Carp ponds, in addition to their ornamental features, can, to a greater or less extent, be utilized as ice ponds, i. e., in proper latitudes. In many instances these ponds can also be utillized for domestic waterpowers, for raising water or doing other duty for the farm, the household, and rural purposes generally. With intelligent and generally inexpensive preparation, one ton of carp can be raised annually to each acre of water area, and this without feeding and with but slight attention. Carp can be had from the government, free. I will cheerfully give any further information possible to those sending postagestamps for reply."

Having never visited them, and perhaps never should but for the article referred to, I packed my satchel with a few necessary articles, and my pocket-book with a few quite necessary greenbacks, and started for the multitude of islands, the number and names of which seem to be legions. I shall never regret the venture, but always remember it with pleasure. For a rest, I never before found a place so perfect as the Thousand Island Park. It is quiet, but not so quiet as to cause ennui. You can rest in a hammock under the shade of the trees, or in your cottage until you have enough of this, and then take a walk along some of the shady roads that seem to run in every direction, on the banks of the river, or away into the woods; or.



ARTIFICIAL WATER, WITH ROCKS.

THE THOUSAND ISLANDS.

The multitude of islands in the St. Lawrence River, known as the Thousand Islands, are beautiful beyond description, and are known all over this country at least, and appreciated and visited by tens of thousands every summer. In our Midsummer Number last year we took occasion to say a word or two in favor of these islands as a summer resort. The following communication, from one of our subscribers, is in keeping with our experience:

"Mr. VICK: — Early last August, when thinking of some place for a rest for three or four weeks, being tired and weary with labor and the heat of July, I observed in your MAGAZINE a description of Thousand Island Park, with some remarks about the islands generally.

if preferred, take a seat in some shady spot on the bank of the river, where you have a good view of some of the islands and the passing boats. A favorite spot for me was a little bay nearly half a mile down the river, where, on a rustic seat in the cooling shade, I read and dozed, and took solid comfort.

"In the evening, if so disposed, you can attend some lecture or concert in the great tent, and some of these performances were of great excellence, and were not only attended by the people on the island, but attracted excursion boats with thousands of passengers from Kingston, Brockville, and other places. The boats for hire are the safest and most comfortable that I have ever seen, with a chair to sit in as comfortably as at home. I am not much of a fish-



LITTLE TRAVERSE BAY AND VILLAGE.

erman, but with the boatmen for guides to take passengers to the fishing grounds, the merest novice must meet with success.

"The trip around the islands in the little steamers that make excursions twice every day, is an enjoyment no one can forget. These little boats wind around among the islands, in narrow channels, and give you a ride of forty miles at each trip.

"There is no hotel at this point, and this is a deficiency felt by many. There is a large eating house, and meals which were merely passable were served at a very moderate price. Lodgings are obtained at the cottages at a

reasonable price. It seems to me a first-class hotel is sadly needed.—F. S."

RESORTS OF NORTHERN MICHIGAN.

We have already spoken of the Lake Superior region, and the pleasures of a water excursion through the great lakes. To some, however, water travel is not pleasant, and to all such we suggest a delightful land journey, by the Grand Rapids and Indiana railroad, from Grand Rapids running north through the whole great peninsula to Petoskey and Mackinac. "From Grand Rapids to Mackinac," observes an enthusiastic writer in the *Illustrated Christian*



SCENE ON THE BEACH AT MACKINAC



BOYNE RIVER.

Weekly, "is almost as unbroken a forest as when the Pilgrims landed upon Plymouth Rock. And at the present terminus of the road (the bay and village of Petoskey), those twin camps of Israel, the Presbyterians and Methodists, have pitched their tents. And here they throw the fly and draw the troll, the one party catching fishes who bite of their own free will, and the other taking in the trout, bass, and pickerel, which were ordained as food for good and hugnry Calvinists.

"Walk back with me through these woods. The very air is laden with the blended fragrance of trees, shrubs and mosses. Ground Pine draws its graceful arabesques upon the amber background of fallen leaves and needles. The Wintergreen and Partridgeberry shine with bright vermilion dots here and there. Pick up a bit of this Princess Pine and touch its glossy green leaves to your tongue, and you will forget twoscore years and be a boy again under its magic, well-remembered flavor. Here is a bed of moss. You stoop to examine it, and close beside it do you mark in the moist earth that delicate but sharp impress of a tiny hoof? There stood a doe, not ten minutes since. I'll warrant. Over yonder comes the music of a brook. Come up to it cautiously. Put aside the bushes by the hand. Do you see where, just below, the water pours, white and sparkling, over a fallen trunk? Bring your hook carefully over this underbrush and drop it just where the current will sweep it over this miniature cataract. Careful! Whisk! You have him, my friend, as beautiful as a Lily from Japan, and as toothsome as an Orange from Sorrento.

"For my part, except doing anything in the woods, there is nothing I like better than doing nothing. To lie still and hear the near barking of a squirrel overhead, or the distant drumming of a partridge, or the soft cooing of a dove, that is a vacation of itself.

"Do you notice how subdued all the sounds of the forest are? There are wise city people who tell us about going to the woods to hear the birds; who believe that the Robin sings in the Pine, and the Thrush and the Cat-bird, our sweetest musicians, hold their concerts in the deep recesses of Oak forests. The singing birds love our orchards, our gardens, the hedges by the roadside, the banks of streams, and the copse that stands before the great wood itself. But in the deep shadows few birds penetrate. I have spent days in the woods hearing no voice of a bird other than the plaintive Chick-a-dee. So here the one thing that most oppresses us is the deep silence of the woods."



INLET TO THE LAKE.

ALEXANDRIA BAY.

In another place we spoke of the Thousand Island Park, occupying a part of one of the largest of the islands, being eight miles long and three to four miles wide. Some portions have been cultivated as farming lands for very many years, but most of it is charmingly wooded. On the lower end of this island is Westminster Park, belonging to the Presbyterians, while the upper part is Thousand Island Park, which is managed by the Methodists. The lower portion is separated into two parts by what is called the Lake of the Island. This quiet lake is five or six miles long, and our little engraving shows the charming inlet to this equally charming lake.

Near the lower part of this island is the celebrated Alexandria Bay and the equally celebrated Crossmon House, where we have enjoyed the most superb entertainment that heart could desire. The Thousand Island House is also situated near, and both are kept with liberality and elegance.

The channels about these islands are the Paradise of fishermen. The boats are the most convenient and comfortable in the world, the boatmen the most accommodating, and the pickerel and muscallonge in the greatest abundance. The large engraving, and for both of these we are indebted to *Scribner's Monthly*, shows the general character of the boats, and

the boatman engaged in assisting the amateur fisherman to land a muscallonge.

It has only been within eight or ten years that general attention has been directed to the Thousand Islands as a summer resort, although it had long been the chosen recreation ground of a few choice spirits. Not until 1872 was the attention of the public turned to the Thousand Islands as a "watering place," or resort for pleasure seekers and invalids, although some discerning ones had been in the habit of spending a few summer days or weeks there for more than a quarter of a century previous. There Governor SEWARD shook hands across the party chasm with SILAS WRIGHT, and caught bass and muscallonge with him from the same boat, exchanging practical quotations and cheerful jokes instead of political opinions and arguments. There the Rev. Dr. GEORGE BETHUNE. dropped theology, and General DICK TAYLOR forgot military tactics, and floated sociably together down among the islands. The wily MARTIN VAN BUREN, his witty son JOHN, FRANK BLAIR, and other politicians of the old school, found respite from the affairs of state and partisan squabbles, and were soothed and softened by the influences of nature. when these intellectual giants returned from their fishing expeditions they found rare good cheer and comfort in the unpretentious old Crossmon House at the Bay, where the elder



CATCHING MUSCALLONGE.

Crossmon was then known as the prince of country landlords, and in such goodly company learned thoroughly the fine art of managing and entertaining guests. Two or three things occurred opportunely to draw immediate attention to the river attractions. George W. Pullman, the palace-car king, had become enamored with the place, purchased a beautiful island nearly opposite the Bay, and erected thereon suitable buildings for a luxurious summer residence. By his invitation, in 1872, General Grant and family, and a party of

friends, went to PULLMAN'S island as his guests, and remained eight days. The same year a large party of New York and Southern editors made an excursion to the Islands from Watertown, N.Y., where the Annual State Editorial Convention was being These two events held. brought the Islands to the notice of the people in all parts of the country. So when the big, new hotels were opened in the summer of 1873, the

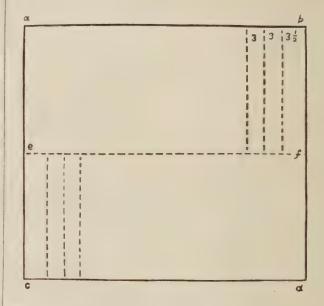
people at once began to hasten to them, and since then they have continued to come every year in large numbers. The number of visitors last year is estimated to have been 150,000.

About the same time there began to be a demand for islands on which to build summer cottages. A large number were sold in 1872 and 1873, and the demand and sale have continued each year since. Of course the best of the islands have now been appropriated, but there are desirable ones left, and beautiful points, also, on the main shore and Wells Island.

PREPARING GROUNDS.

Preparations for lawn-seeding and tree-planting should be made sufficiently in advance to allow of the work being well done. The present month is a good time for such work. Lawn ground should be prepared by deep digging and by underdraining if not naturally dry. A depth of two feet is not too much to ensure a lasting piece of grass. When a piece of new ground is to be fitted for this purpose, and where trees do not obstruct, the work may be performed by deep or subsoil plowing; if the piece is quite small, however, it will be more practicable to do it with the spade. In this case the soil should be trenched, an operation seldom performed in this country. We would not trench ground where it is possible to effect the same result with the plow; but there are cases where this cannot be done. Trenching would, no doubt, be oftener practiced advantageously than it is, if the mode of operation were better understood. It consists in turning the whole soil of a given area to a specified depth, or to such a depth as will loosen all the good soil, and, if the surface soil be shallow, shall also disturb and break up the subsoil more or less. A very hard, cold, poor subsoil ought not to be brought to the surface and take the place of good soil that it covers up, if immediate favorable results are expected; but, without doing this, there are certainly two other courses that may be adopted. One of these is to remove the surface soil a good spade in depth, and then to loosen the soil beneath to the depth of another spade; the other is to turn the surface soil beneath, and to bring a spadeful of the lower soil to the top, being careful not to go more than two or three inches into the very poor soil, and thus mingling only a small portion of it with that of the surface. In trenching, when the whole of the soil is inverted, it is necessary to remove a certain breadth of soil to the full depth; that is, to dig a trench as deep as the soil is to be worked and remove the whole of the soil to the opposite end of the piece of ground, for the purpose of filling in at the close of the work. Suppose a piece of ground fifty feet by a hundred feet is to be worked; apparently it will be necessary to dig a trench of a convenient width, say three and a half feet, the whole distance across one end, and cart or wheel the soil to the other end, and this was formerly the practice. Now, however, a much better method is in use, consisting in working the ground in strips from four to five feet wide, thus avoiding the necessity of carting the soil. The accompanying diagram illustrates this method. Let the space enclosed by the lines

having a, b, c, d, at the corners represent a small plot to be trenched, which is eight feet wide. By running the line e f through the middle it will be divided into two strips, each four feet wide; by commencing at the line b f, and throwing the soil just outside, along the line f d, it will be in position to use at the close of the work on the strip e c f d, which will be commenced at ec, and the soil there thrown out of the trench will fill the last one made on the first strip, and along the line a e. By making the first trench three and a half feet wide, space will be given to receive the soil from the next trench, that is to be dug only three feet wide, and allow of a slope to prevent the soil from falling back. Thus, by digging successive trenches three feet wide over the whole strip,



and throwing the soil forward into the trench ready to receive it, the whole soil is worked to the depth fixed upon. A piece of ground of any length may be similarly worked by dividing it into four feet strips.

As the work progresses, a quantity of well-rotted manure can be added at a distance of eight inches below the surface, and another coat about four inches below.

In this manner, a piece of ground that is intended for a lawn, or for any vegetable crop that is to remain for a long term of years, such as Asparagus, for instance, may be very substantially improved.

The last of August and first of September is an excellent time for sowing grass seed. The surface of the ground should be carefully levelled, or graded, and raked until it is fine and smooth. Take advantage of a time when there is no wind stirring, and scatter the seed evenly, at the rate of four bushels to the acre, or one quart to every forty square yards, and afterwards rake the ground over very lightly and carefully.



VEGETABLE GARDEN BEAUTY.

Vegetables are grown mainly for their value, and not for their beauty, and yet there is beauty in nicely grown vegetables and well-kept vegetable gardens, and those who have seen the vegetable carts in Europe on their way to market, will agree with us that they look like mammoth moving pyramidal bouquets. Arranged in one section are green Cabbage, in another, red; then Cauliflower, Onions, and Turnips as white as snow, relieved by sections of scarlet Radishes and orange Carrots, with abundance of Lettuce to serve as the green of this great bouquet, which is made up with taste and an eye to effect.

We thought of this one fine morning in June, as we passed through the vegetable garden, and



were greeted with the bright pink flowers of the CHIVES that formed a beautiful border along the main path, a foot and more in height, learing thousands of blooms above the masses of needle-like leaves.

VEGETABLES.









The Chive is a hardy, bulbous-rooted perennial, with cylindrical leaves, seven or eight inches in length, and borne in thick tuits. The bulbs are only about half an inch in diameter. The flowers are globular at plish. The habit of the plant is very well shown in our engraving. The bulbs should be planted in rows, four or five inches apart, and covered three inches in depth. The leaves have the flavor of the Onion family, and are cut in early spring for flavoring soups and spring salads. Cutting the leaves to the ground occasionally does no injury, but is a benefit unless done too frequently. The flowers begin to appear, in this cli-

mate, about the first of June. They form little or no seed, so new plants are formed from the bulbs, which can be obtained of most seedsmen at a nominal cost per bunch, the bunches being clusters of little bulbs. After growing a few years, the bulbs should be taken up, either in the spring or autumn, and reset, when, if kept free from weeds, they will soon make large bunches of unbroken borders. In old times, many people thought they could not raise chickens without a little chopped Chives to mix with their food.

Some of the curled Borecoles, or Kales, are as beautiful in foliage as almost any ornamental plant we are acquainted with, and, like the curled Parsleys, are admirable for garnishing; indeed, we have used the leaves for decorating large rooms, in connection with flowers, and no one suspected they were indebted for so much beauty to the vegetable garden, and to the first cousin of the Cab age.

Kale is served like Cabbage, but it is much more hardy, and will endure considerable frost. In quite northern climates the Kale will do well in the garden until Christmas, and in mild-



er climates Kale can be cut all through the winter. When cut frozen, they are at once placed in cold water. They do not firm heads, like Cabbage, but furnish abundance of curied leaves that make the very best greens. The culture is the same as for late Cabbage

Another ornamental plant, almost as pretty as the Salvias of our flower gardens and conservatories, is the COMMON SAGE. The plant, or clump of plants, from which our engraving was made, was several feet in diameter, with more than a hundred spikes of its beautiful blue and purple flowers. There are few hand-



somer plants than the Sage when vigorous and in bloom. It is perfectly hardy here in the severest winters. Sage is usually grown from seed, though it may be propagated from slips or cuttings. Sow in hot-bed in March, or in the garden in April. Plants should be set in rows, twelve inches apart in the rows. When grown exclusively for their leaves, the Sage should not be allowed to flower, but a few plants will give all the leaves needed by a family, and flowers besides.

If it was not for its name and the uses for which it is generally grown, there are few prettier plants than the finely-curled PARSLEY. The



fact, however, that it is so useful seems to detract from its beauty. It made trouble for a poor gardener, who once used it freely for bouquets, when he was informed by the lady that she wished bouquets for the parlor, and not herbs for the kitchen. No one, however, can deny its beauty in the vegetable garden. The seed comes up slowly and should be sown very early, for it is perfectly hardy. Sage bears transplanting well. In fact, transplanting improves the form of the plant. For good, handsome plants, set them ten inches apart in a rich soil.

MUSHROOMS.

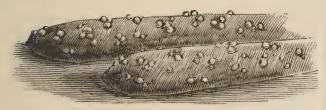
Almost every day we receive requests for information about Mushroom culture. Indeed, so frequent have these become recently that we prepared printed directions, to save writing. We thought it might not be unprofitable, therefore, to give all our readers the information necessary to success in Mushroom culture. Success, however, is not always assured. We have known many to succeed, and we have certainly been informed of some failures. A lady writes that her husband made a bed in the cellar, and at one time, thinking it might be too cold, covered it with a nice spare carpet, which had been stored away during certain alterations in the house. In one of his nightly examina-



tions of the Mushroom bed, the lamp was overturned. The general result was, an injured carpet and no Mushrooms.

Many of our readers will, no doubt, consider this an unimportant matter, and quite unworthy of particular attention, but were they to see the immense consumption of this fungus in Europe, especially in France, they would think quite differently. There are growers of Mushrooms in the suburbs of Paris that gather and send to market more than two thousand pounds a day each. Then there is something so singular, almost wonderful, about Mushroom culture; no seeds or roots are planted—only a few pieces of dirt, apparently, stuck into the bed—and yet a crop of pearly whiteness is produced, as if by magic.

Our friends are, of course, well acquainted with the Mushrooms of the meadows, so abundant in many places in the damp, cool weather and dewy nights of autumn. Some pass them without notice, or think of them only as Toad-



stools, while others seem to rush for every tiny specimen as eagerly as though they were gathering diamonds.

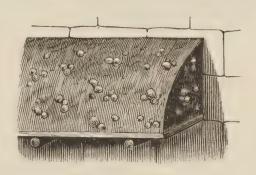
The Mushroom is a very accommodating plant. We have seen them growing in old tubs, in out-of-the-way corners of sheds, in abandoned greenhouses, on shelves in stables, somewhat as represented in the engravings, and in every case giving apparently a good and healthful crop.

All that is needed for success is a temperature from 50° to 60°, some fresh horse-manure and a little spawn. Having procured what fresh horse manure is needed, mix it well with



about one-third of its bulk of good loam, and you are prepared to make your beds in whatever place you prefer. If you determine to form beds, make them narrow, certainly not more than five feet in breadth, and about fifteen inches in height. The material must be made compact by beating down as evenly as possible. If under cover, the beds may be made flat on the top, but if in the open air, they should be rounded to shed the rain, somewhat as shown in the engraving. After the beds have been made a week, there will be considerable heat produced by the fermentation of the manure. Bricks of spawn should have been secured previously, and they can be sent everywhere, post-

age or expressage free, at about thirty cents a pound. Break them into pieces as large as walnuts, and insert in the beds, just below the surface, about ten inches apart. One pound of spawn is sufficient for a space two by six feet. If there seems to be much heat, do nothing for a week or ten days, until it somewhat subsides. Then cover the bed with an inch or more of good earth, pressing it down with the back of a spade. It is not likely in a large bed water will be needed at all; but if the material should appear very dry, water lightly with warm water. In small beds, or pails, or anything of the kind, it is probable water will be needed once or twice. Mushrooms will begin to appear in about six weeks after planting the spawn, and



can be gathered for three or four weeks. In gathering, take up the Mushroom entire, leaving no stem in the bed, and placing a little earth in the hole made by its removal. When the crop is gathered, cover the bed with a little more earth, beat it down gently, and give a pretty good moistening with tepid water, and in about a month more another crop will be produced.

In closing, we give a view of what some mischievous and artistically inclined boys did to a Mushroom bed by the aid of a little lamp-black, converting the little fellows into goblins or fairies, or something of the kind. Of course, we present this as a thing to be avoided and not imitated, and sincerely hope there may be no mistake on the subject.

In these suggestions on the culture of the Mushroom, several correspondents will find answers to inquiries recently sent us. We preferred to give a page to the matter rather than to answer the inquiries separately, as more useful to the general reader.





FLOWERS FOR BOUQUETS.

A correspondent of one of the London journals declares that some of the best of our annuals, those common in our gardens, and familiar to all gardeners twenty years ago, are now unknown to young gardeners, and that one would be puzzled to pick a lady a bouquet of flowers from positively good gardens, that was not mainly composed of Pelargoniums, Verbenas, and other plants commonly used for bedding. This is true, and much more true of English gardeners and gardens than of American. We shall never forget what a pleasant relief it was to us when we turned from the elaborate and really beautiful bedding to the herbaceous borders at the Kew gardens. In this country we do not follow the bedding system so fully, nor is the work so elaborately done, and the annuals are neglected only in what are called the "better class" of gardens, many of which have all the faults with few of the merits of English gardens of the same class.

We would not like to see the bedding system abandoned, nor do we believe it ever will be. What can be prettier than a well-kept emerald lawn illuminated by a few beds of bright flowers, or elegantly-colored foliage, that keep bright and in perfect order from June until October. But this is not all the flower garden we need. It is merely the parlor garden, and we want the sitting-room, dining-room and kitchen garden, where we can have more freedom to pick and gather and do as we please, without the least danger of disturbing the harmony of things, or marring the beauty of the showy beds made to be looked at but not touched—in short, a part of the garden where neither the plants nor their owners need keep dressed for company. The

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following suggestions of desirable varieties for cutting, by the correspondent of the *Journal of Horticulture*, are very good. Wallflowers in the north we cannot have without special treatment, and no one in this country thinks of growing Balsams in pots. "The Immortelles are a class of annuals useful in early autumn and onward till frost nips them. They are various in color, being pure white, as in Ammobium alatum; straw-yellow, rose, and white in Helichrysums, rose and white in Rhodanthe Manglesii. If cut

off before the blooms are fully expanded and dried in a box or a loft they are especially useful in helping out with a winter bouquet. Centaurea Cyanus is a useful

bold blue flower, telling well in loosely-made table bouquets. C. moschatus alba is also good. The varieties of Gaillardia, such as picta, Josephus, grandiflora albo-marginata, and Amblvodon, are conspicuous either in groups or in the borders, and always useful for cutting. Phlox Haageana and Drummondii are so good and constant in blooming they are even useful for the "ground painting," but as a bouquet-flower not to be despised either mounted or on the natural stalk. As a yellow and orange color, and with an odor that is agreeable to some people, may be mentioned the small Marigolds, Tagetes signata, T. patula, and T. lucida. These plants are all very fine bloomers, continuing until the arrival of winter. The Scabiouses, such as grandiflora candidissima, S. grandiflora florepleno, S. nana striata, are all of them very attractive. The Statices—sinuata, Thouinii, both blue, and Bonduellii, light yellow-commend themselves on account of their light feathery masses of color, and by their entire freedom of form—of contrast with the stiff forms we meet with in gardens now-a-days, and of their usefulness in all descriptions of bouquet-making. They flower so abundantly and so long that everybody should have a patch or two of them. Statice incana, eximea, latifolia, and coccinea are perennial species, equally as useful for the purpose indicated.

"Balsams may be grown as well or better out of doors than in pots, provided the ground be good and the situation open and warm. The blooms are of great service when mounted, do not wither soon, and admit, owing to the delicacy and variety of their colors, of many combinations. The Dianthus is such an extensive class now-a-days that it may just be necessary to mention a few of the best for the purpose in

question. D. imperialis, with magnificent double flowers in great variety of color, and its variety albus plenus; D. Heddewigii in many sorts, especially laciniatus and laciniatus striatus. D. diadematus is also very fine. With these and the well-known biennials, such as Stocks, Wallflowers in great variety, Sweet Peas, Clarkias, and a host of others, sweet-scented or not, but always pretty, the ladies of the family 'can cut and come again.'"

AMMOBIUM ALATUM, previously mentioned, is one of the most useful little white flowers in cultivation for bouquet making. We first saw it used in this way extensively in San Francisco, where it seemed to be the only white flower



largely cultivated for the purpose. The engraving shows about the natural size of the flower. The petals are thick and of a chalky whiteness. The plant is easily cultivated, grows about eighteen inches in height, and the branches are not round, but angular in appearance. The flowers are used before fully open.

The HELICHRYSUMS, red, rose, and yellow, are excellent, the reds running into bronze and



brown, but the white are not of a good, clear color, being creamy, or dull straw-colored. Seeds of the Helichrysum grow very readily. The plant is about two feet in height, strong and bushy, and bears a great number of

flowers, which should be picked in bud, or just as soon as they are open, if designed to be kept for winter flowers, and dried in the shade.

The RHODANTHE is a beautiful, delicate, bell-formed flower, colors being rose, white, and purplish. The plants are somewhat delicate and do best in a place partially sheltered from the wind and the fiercest sun. The Rhodanthe makes an excellent pot plant when properly treated.

Our London friend neglected to recommend one of the very best of the everlastings, the ACROCLINIUM. It is a daisy-formed flower,

about the size of the wild Daisies now so popular with the ladies, with a similar yellow center. There are two varieties, rose and clear white. The plants are easily grown from seed, are of strong growth, about eighteen inches in



height, and bear a great number of flowers. It is a charming plant when in flower in the garden, and makes an excellent bed, when planted about a foot apart. For winter use, cut the first day the flower opens, tie up in small bunches and dry in the shade. If flowers remain longer on the plant before drying, the center becomes black.

The GAILLARDIAS, commonly known as



Blanket Flowers, are not only desirable for cut flowers, but are good bedding annuals, being free and constant bloomers.

The Balsams, when furnished with artificial stems, are among our best flowers for bouquet-making, but are still better for filling baskets or other forms, and, when used in this manner, keep fresh for a long time.



Arranging flowers loosely and prettily and naturally in vases and other ornamental receptacles for flowers, is a very easy work, requiring only good taste and some knowledge of the harmony of colors. As a rule, ladies do this work well, and need no suggestions from us. The filling of baskets is a little more difficult, because more formal, or artificial. First, line the basket with tin foil, or scatter a little Lycopodium, or other green material, to form a kind of green lining, and over this put some

strong paper. If the basket is not so open as to show the lining, a simple lining of paper will be enough. Then fill the basket with



as recommended for floral designs. It is well to give an edging or border mainly of green. Very few flowers have stems suitable for nice bouquet work, so it is the custom to "stem" all flowers, that is, give them artificial stems, and the material used for this purpose is broombrush or wire, to which the flowers are attached with spool-cotton or fine wire. These stiff stems can be made to hold the flowers in any position desired. To keep the flowers from crowding each other, and also to supply moisture, it is usual to wind damp moss around the stem of the flower at its connection with the artificial stem. The central flower, which is usually the largest, must have a stiff, straight stem, for this really forms the back-bone of the bouquet, as well as the handle.

The OXYURA CHRYSANTHEMOIDES is a pretty neat hardy annual with daisy-like flowers, which



should become popular, since the ladies have taken such a fancy to the wild Daisy, for it is much prettier, being a light lemon-yellow, with a broad, clear-white edging. The plant is of neat habit, about eighteen inches in height, and blooms very freely.

The Brachycome, or Swan River Daisy, is another daisy-like flower that deserves more attention than it has received. There are two varieties, blue and white, both in form something like the Cineraria.

PHLOX DRUMMONDII is one of the most valuable annuals we have, either for bedding or cutting, and will keep in good condition in water for nearly a week. We have sent collections for exhibition at State fairs thousands of miles, and without a single failure.

SWEET PEAS are delightful, both for color and fragrance, but are not very enduring.

MIGNONETTE of course every one grows, and it should be always on hand.

For small bouquet work the AGERATUMS are very convenient. The flowers are mainly blue and brush-formed. For like purposes, the ASPERULA is also useful, bearing clusters of light-blue or lavender flowers, quite sweet-scented.

CACALIA COCCINEA has small, tassel-like,



scarlet flowers. It is sometimes called Flora's Paint Brush. Very desirable for small work. Half-hardy annual, should be started in hot-bed.

SWEET ALYSSUM is always useful for the small bouquets, and though its fragrance is not pronounced, it is quite delicate, having something of the aroma of the hay-field. Flowers small and white, in clusters.

The CANDYTUFTS of all kinds are as desirable as anything we possess, giving large quantities of useful flowers during the whole summer—white, lilac, pink, and purple.

The Myosotis Palustris, the true Forgetme-not, is a perennial, but flowers first season if sown early. The flowers are blue, with a white eye, about a dozen forming a small raceme. A moist, cool place is best for this plant.

We have presented some of the annuals best suited for cutting, but there are many others which space will not permit us to describe.

AMONG THE PÆONIES.

The hybrid varieties of the Chinese Pæony are among the most valuable herbaceous plants in cultivation. The large, bright flowers make the grounds appear very gay, and they are excellent as cut flowers for the decoration of large rooms and halls. Many of them are quite fragrant, and some have the odor of the Rose. When selected at the early stage of bloom, many varieties are little inferior to good Roses. If planted with reference both to their colors and time of blooming, the best effects may be produced. The aim should be to keep a variety of colors in bloom for the longest time; fortunately a selection may be made by which the blooming season may be extended quite a month. The following kinds are named as the



PÆONY FLOWER.

most valuable at the different times of blooming, excepting those that come in the medium season; of these the varieties are so numerous and so fine one can hardly fail of procuring what is satisfactory, and we confine our notice to a few of different colors, of which there are many others equally as good. But of the early, the late medium, and the late kinds, the varieties are quite limited, and our list of these covers the most valuable of them.

EARLY VARIETIES.

Smitzii—single, dark-crimson flower, resembling P. tenuisolia in soliage, but not quite so sinely cut; a very distinct sort.

Grandiflora carnea plena—a large, double flower, with the outer petals blush or flesh-color and the center ones yellowish and fringed.

Rosea grandiflora—a very large, double flower; color, a deep rose; fine.

Rosencrantz—double, blush, changing to white; center petals fringed. This variety is the nearest to white among the early kinds.

MEDIUM VARIETIES.

Amabilis lilaceus—this sort is somewhat peculiar in having its outer petals and those of the center of a blush, or flesh-color, while those between are buff; very handsome.

Double White—this one should be in every collection, as it is beautiful in itself and, by contrast, adds greatly to the effect of the colored varieties.

Bicolor—the outer petals are a deep rose-color, while the center is yellowish, striped or marked with red.

Buyckii—this variety is a very fine rose-color shaded with salmon.

Comte de Paris—a large, full flower, bright rose-color, and fragrant.

Doyenne d' Engheim—a rich, crimson flower, nearly full.

Genesee—a large flower with a single row of outside petals of a pale blush, and the inner ones a light straw-color.

Hericartiana—large-sized flower, outside white, inner petals white with straw-color tinge, fragrant.

Perfection—outer petals rose, and the inner salmon streaked and marked with purple.

Pottsii—this is a very desirable sort, of a dark, purplish-crimson; very fine.

Pulcherrima—rose-color and salmon; beautiful.

Victoria modeste—a remarkably distinct kind; the outer petals of a violetrose color, surrounding a creamy-buff center.

Virance—color a purplish-rose; this variety has a perceptible odor of wintergreen.

Pio Nono—semi-double, bright crimson; has a strong and pure odor of wintergreen.

Delicatissima—full; violet rose; fragrant.

Roi Guillaume—large flower; rose-colored; fragrant.

LATE MEDIUM VARIETIES.

Duchesse d' Orleans—violet-rose with lighter rose center.

Diversiflora—white with creamy center.

Globosa—blush, becoming pure white; quite full; fragrant.

Purple Crown—loosely double; very dark crimson.

Triomphe du Nord-violet-rose, shaded with lilac.

LATE VARIETIES.

Active—very large and full; bright rose-color. Beaunte Francaise—outer petals rose and salmon center.

Festiva maxima—white and center striped with purple.

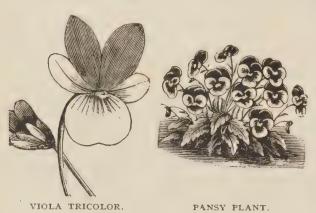
Fragrans—large, double, fine form; deep rose-color; strong rose fragrance.

Fulgida — semi-double; purplish crimson; center filled with bright-yellow anthers.

Lamartine—semi-double; very dark maroon. The semi-double varieties are as handsome as those that are very full, and in making a collection as great differences as possible are desirable, and all the kinds named, and many others, are very beautiful.

THE PANSY.

That the Pansy is a favorite flower there is the very best of evidence. In April, 1879, we gave, in the MAGAZINE, a little of its history and culture, with a colored plate, showing seven different blossoms picked from one bed. We had not only unusual calls for this number, but also for thousands of copies of the colored plate, until, in time, our stock became exhausted. We, therefore, had a new plate made this spring, when the flowers were at their best, which we consider quite equal, if not superior to the last, and this we take pleasure in presenting to our readers with other good things in this Midsummer Number, with such facts as we



judge will be interesting and profitable, though in doing so we are compelled to repeat some things already familiar to many readers.

The Pansy is the child of the simple little annual, Heart's-ease, or Violet, of Europe, and perhaps of America, though it is thought to be a naturalized citizen of this country. This little fellow we present to our readers, so that all may see the humble origin of the beautiful Pansy, and the wonderful improvement made by care in hybridizing and skillful culture.

This flower has many names; indeed, every country gives it a pet name. Fringed Violet, Trinity Flower, Butterfly Flower, Love and Idleness, Step-mother, and Johnny Jump Up, are among the most common, while the French call it Pensee, from which the English name, Pansy, is no doubt derived.

When observing how these flowers flourished in the moist climate of England and Scotland, and how they seemed to revel in the fogs and mists so common in those countries, we feared that America could never produce good Pansies, at least, only well north. Experience, however, has proved that our fears were unfounded. By growing seed from plants of the most compact habit, and that bear the sun best, we have Pansies that rival those of any part of the world, and strange to say, the finest and largest we have ever seen were from the far south, in the vicinity of Charleston, South Carolina. The southern winters are wonderfully adapted to the growth of the Pansy.

For the production of good flowers, the Pansy must be young and vigorous, and making a rapid growth. An old, or starved, plant is worthless. It delights in cool nights and moist days, and a week of showery weather will usually double the size of the flowers, and far more if for some days the plants have been suffering for water. The Pansy is a winter flower for the south, but, at the north, the times of greatest beauty are early spring and autumn. If plants come into bloom in the heat of summer, the flowers will be small at first, but, asthe weather becomes cooler, they will increase in size and beauty. Often plants that produce flowers two and a half inches in diameter during the cool, showery weather of spring, will give only the smallest possible specimens. during the hot, dry weather of summer. The flowers will be better in the middle of the summer if the plants are grown where it is somewhat shaded from the hot sun, and especially if furnished with a good supply of water.

Seed may be sown in the hot-bed or open ground. If plants are grown in the autumn, and kept in a frame during the winter, with a little covering in the severest weather, they will be ready to set out very early in the spring, and give flowers until hot weather. If seed is sown in the spring, get it in as early as possible, so as to have plants ready to flower during the spring rains. Seed sown in a cool place in June or July, and well watered until up, will make good plants for autumn-flowering, and flowers may be gathered, in mild seasons, as far north as Rochester, all through the winter months.



NIGHT-BLOOMING CACTUS.

Why does not everyone invite a rare and beautiful evening visitor by cultivating some Night-blooming Cactus? Nothing can be easier than to make such an acquaintance, and once made, it would be certain to be valued and retained.

Get a cutting of one of them from some friend, and plant it in a pot of common soil, for after several experiments I find it thrives well in any soil. In three years you will have a small blooming plant which will increase in size and in results every year. Or, if you have not patience to wait three years-and multitudes of persons who might have their own bed of crisp, nice asparagus deny themselves the satisfaction because "three years are too long to wait for anything" - why, then purchase a plant from the florist; but do not let this year pass away without putting in one of these plants as an inmate of your house. There are several kinds of Night-blooming Cactus. *A flat-leaved one that I had grows rapidly, looks well all the time, has no caprices, and no insect enemies to battle, and is a well-behaved plant, requiring very little care, but performing duty admirably. Through the winter it need not monopolize your sunny windows; it will be satisfied with some obscure place with ordinary light and heat, and moderate watering. When you see it putting out long spurs, cut them off at the desired length, or the plant will be too tall, and be troublesome to move. When you cut off a piece, put a little earth on the end of the cut branch for healing, and set out the pieces which you have cut off, which will readily take root, and give you new plants. In the summer set your plants out doors, not in a very sunny exposure, but where the sun reaches it some part of the day. In the latter part of the season you will be surprised some day to see buds starting at the sides of some of the leaves. Then water your plant freely.

On the eventful evening when your buds, having grown several inches long, begin to throw back the slender, thick outer leaves of

the calyx, watch for the opening at the end of the bud, and when it is about the size of a pea make your preparations for a night of delight. Send word to your neighbors that you are to have a blossom, and put the plant in the center of the room, which must be well lighted, and draw up all the shades, that every passer-by may share your pleasure. Or, place your tub at the front door, or in the yard, and have an open-air party. Make some arrangement whereby the outer world may see your beautiful guest. Don't gossip now with those who come in, for all trivialities must give way to the marvelous revelation before you. Watch your flower as it expands, and the delicate white petals quiver, as with the conscious delight of being, and you can but feel an awe in the presence of this pure creation. In two hours from the first signal of movement in the bud your flower is before you—a wonderful miracle of beauty, and its fragrance fills the air. You find the arts of the chemist have their limitation. No "extract" of Night-blooming Cereus approaches this delicious perfume in subtle sweetness. The size of the flower also amazes you. A quart bowl would not cover it. As your friends gaze at the exquisite purity of the petals, and look into the heart of the flower and see the long stamens cross each other so curiously, they drop all their common adjectives, and the most thoughtless among them may take home the lesson of purity and completeness. The most undevout must recognize the presence of creative and designing force in the flower before them, and wish to be in harmony with the spirit which rules the orbed worlds and the subtle juices of the flower. One blossom of the Night-blooming Cactus is a marvel—a revelation never to be forgotten; and no repetition ever makes it seem common or stale. your prosperous plant may have a dozen or twenty of these queenly flowers open on the same night; and as your friends pass around it, and gaze at one after another of the flowers, they feel that in this sudden outpouring of beauty and fragrance you have offered them

the most delicate and yet most magnificent hospitality.

They have enjoyed the full-orbed beauty of the flowers, but they do not tarry to watch with you the waning. If it is your first flower of the kind, you will not leave it; and after midnight you will see the petals draw closer and closer together. About three o'clock the petals have gone back into the shelter of the calyx, and now the blossom hangs limp and dejected. The next morning you cut it off; but it has performed a splendid mission, and lives a pure memory with all who have seen it.

*This plant is undoubtedly some species of Phyllocactus.

TWO DESIRABLE CLIMBING VINES.

Nothing adds so much to the beauty of a garden or of a place generally as a climbing vine. It can be planted where there is not room for an expanding shrub, because it takes space in another direction, where it is more economical. It is more attractive than a shrub, for it seems to grow at its own sweet will, and however carefully trained, it will branch out, reach up and around, and hang down so gracefully as to conceal the hand of art. It hides the deformities of fence or wall, and intercepts views which do not add to the prospect. Whatever you do not like to see near you, the climbing vine in-



AKEBIA QUINATA.

terposes to shield from you with its own generous beauty, and you cannot help liking to see that, and feeling grateful for its kind offices.

One of the most charming vines we know of is the Akebia quinata. It is a very free grower, reaching easily twenty feet, of a beautiful shade of green, with delicate bunches of leaves about two inches long, five leaves on a stem, and four or five of these stems in a group. The groups of leaves are a few inches apart, and thus form a dense, although delicate, mass of green. The vine effectually conceals the frame, so you need

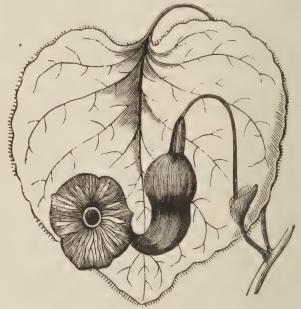
not spend your substance for sophisticated arrangements of lattice-work. Give it a wall, or a rude support of any kind, and it will branch



ARISTOLOCHIA SIPHO VINE.

out and cover the space, and no one will ever ask what is behind it.

The blossoms of the Akebia are small, and grow in bunches out of the groups of leaves, so that, in the flower season, for weeks your vine is full of them. They are of a dark brown, just one of the fashionable colors so much used now in art decoration. The cluster of flower-buds with one or two open blossoms, the sta-



ARISTOLOCHIA SIPHO.

mens of which bear a glossy, bead-like tip, may be often seen imitated in Japanese pictures, or in artificial flowers, which cannot, however, imitate their subtle fragrance. Fashion may change the hue of your walls, but it can never make this unique flower other than beautiful, and, in every respect, the Akebia is a vine to be cherished with pleasure.

Aristolochia sipho, the Dutchman's Pipe, is another vine worth cultivating as a curiosity. It is of rapid growth, with coarse, round foliage, somewhat like a Bean leaf, from ten to twelve inches in diameter, of a bright green. At a distance the vine might be mistaken for a Bean vine, but the flowers can be taken for nothing else than a Dutchman's pipe. They are three or four inches long, a yellowish-green brown, and deservedly give the name to the vine. But they leave no odor objectionable to the most delicate nerves; they scatter no fire or ashes, and they are a floral curiosity your friends will laugh at, and when they see your vine they will procure one for themselves.

Both the Akebia and the Pipe grow in common soil, with common attention, which means, of course, very little attention indeed.

Akebia quinata has proved somewhat tender in different parts of the country during the last severe winter.

A GRIEVANCE.

It is a grievance common to many of my sisters of the farm-house—a shabby and unkempt front yard! Now, if I were a man and a householder, and, more especially, a landholder, one of the first bits of finery, which I would display for the admiration of my neighbors, would be a handsome lawn, with happily grouped trees and shrubbery, velvety turf always smoothly shaven, rustic-work and flowers. But as I am only a woman, and a niece, I cannot "say to this man, come, and he cometh; to another, go, and he goeth;" but must await the somewhat tardy pleasure of my elders and betters. Consequently my visions of landscape gardening are exclusively my own. My designs benefit no one. The outside world sees as little of them as the seraglio of the Turk. There is nothing to be seen of the masses of foliage which I would place here and there, the round ball of Arbor vitæ that would look so well in this niche, the pyramid of Spruce with which I would lessen the broad space yonder, the feathery tuft of Weeping Birch, so necessary to the beauty of that corner, the delightful pattern of flower beds which I am anxious to see in a certain sunny nook, and the rock-work which I would place upon the bank as it slopes down to the water. Alas! what do I see instead? A yard shaded in front by a row of Maple trees; on one side a pond of water and a running brook, at the back the usual, nay, more than the usual, complement of

farm buildings, for it is the old homestead, having been occupied by father, grandfather, and great grandfather since the days of the early settlers, each generation leaving traces of its habitation. The present farmhouse stands nearly upon the site of the log cabin which sheltered the family in the days of pioneering.

There has been no lack of enthusiasm for the culture of flowers among those who have since come and gone. Traces of old flower beds are to be found on every side. There is a patch of Lilies, which sometimes sends up a flower-stalk and brings forth a sorry-looking yellowish blossom. There are some ancient Roses, beautiful in their season, in spite of their plebian lineage and their lack of high-sounding foreign names. There are Lilies and Flowering Currants, very fragrant in springtime, notwithstanding their unpruned condition. There are flower beds where very good Petunias, Balsams, etc., are grown, although not in the form of "carpetbeds," "mosaic," or "massing in color." There is, in fact, too much in the yard. It is a thicket, a jungle. Now, a "wilderness garden" may be admirable in its place, yet, few of us admire so much dishabille at the front entrance.

Ah! if I could command the strength of a Hercules for a few days, or the magic wand of a conjurer, what a change might be wrought; but, as in this prosaic age no assistance from supernatural forces can be depended on, I can only state my grievance and hope for sympathy.—N.

SOME HUMBLE PLANTS.

I enclose a specimen of Dielytra, which has no pretty English name that I know of. My mother used to cultivate it years ago in her flower bed. Though not common in this vicinity, it is sometimes found in rocky woods, and I was much pleased, three or four years ago, when my little daughter, who had been out with a Maying party, brought home a plant, bulbs and all. Since that time we have successfully cultivated it in partially shaded places about our premises.

The plant grows to about the same height and blooms about the same time as the common garden Polyanthus, and is a very pretty companion for it. The leaves are handsome, smooth, and deeply slashed, and the double-spurred white flowers, tipped with yellow, are borne a little above them on a slender scape.

Among our garden plants are a few which we always keep in remembrance of the grandmothers. One of them is the little Nepeta Glechoma. They rightly named it Gill-overthe-ground, and Ground Ivy. I am diffident about expressing all the good I know about this

common, unnoticed little plant-weed, if you please. It has small, pretty leaves, modest, bluish flowers, and roots lying near the surface. It is a vigorous and ambitious trailer, responding to a little attention in a way that will surprise one. It is this disposition that makes it useful for commencing hanging baskets and garden vases, which are only awkward things, out of place, without plenty of delicate green trailing over the edges. Last year a lady came to me after every plant was in its place, and I had given or thrown away everything I thought I could spare, saying her husband had just brought home a pretty rustic basket to hang in their piazza. She wanted something to fill it right away. In my despair of obliging her, I thought of the little Glechoma which I had often used, and which grew plentifully in a corner of the garden. I told her it would trail over the sides, and look green and fresh until something nicer would grow to take its place. The nicer plant never put in an appearance, but the basket was very pretty all summer, and scarcely any one who admired it when passing by, would guess it was so well filled by a common herb.—J., Hillsborough, N. H.

The plant mentioned without a pretty, common name is Dicentra cucullaria. In Wood's botany the name White Ear-drop is applied to this plant, and this is both pretty and appropriate.

THE LEGEND OF THE SHAMROCK.

We flower-people love all flowers, from that "wee, modest, crimson-tipped" one "turned down" by the poet plowman, on and up through all gradations until we reach the stately Magnolias of the south. We love them all, simply because they are flowers. We love a few specially and individually, from some inherent beauty in them that suits our own peculiar taste, or from some association too sacred, perhaps, to be babbled into alien ears. We love and hold in reverence a very few that have been made holy by being looked upon by eyes that we, in our soiled humanity, can look into only in dreams. The Rose and the Camellia belong to the blood-royal of flowers. The Lavender is of ancient race, and holds its rank in spite of all the new, plebian beauties that have come in vogue. The Violet, in its purple grace, has made pagans of us all, for we have made it one of our household gods. The Lilies, which the Divine One bade us "consider," have been thereby set apart a "peculiar priesthood," worthy to stand within the very Holy of Holies of Flowerland. Second only to the Lily in sacredness has the beautiful legend of St. Patrick made the Oxalis, or Shamrock, and lifted it up for loving reverence.

When St. Patrick first preached in Ireland,

and stirred the fiery hearts of its people with the strange truths of a new faith, standing once before a powerful chief and his people, he unfolded to them the doctrine of the Trinity. "How can one be three?" asked this heathen chief, as his soul stood trembling on the verge of the new belief. St. Patrick thundered forth no learned disquisition upon the mysteries of a religion that had been "to the Greeks foolishness, to the Jews a stumbling block." Looking down, at his feet, placed there, it seemed,



by the hand of Providence, he saw growing the very symbol of the doctrine he preached. Stooping, he gathered and upheld before the chief a Shamrock leaf.

"Here, in this leaf," he said, "three in one, canst thou behold the symbol of my faith, three Gods in One."

Gazing at the leaf, three parts in one, divisible yet indivisible, the simple heart of the chief comprehended and embraced a doctrine that has puzzled the wisest heads, and confessing his faith, he was at once baptized, and his people followed his example. Since then St. Patrick has been the patron saint of Ireland, the Shamrock or Oxalis the national flower, the beloved and sacred symbol of their religion. Certainly no other flower has ever borne such a part in theology!

So much for the legend. Now, for the cultivation of the Oxalis. Several species grow wild in the meadows in various parts of the South, blooming in spring and early summer, and, of course, it thrives well as a garden plant, where it may be cultivated in masses or for

borders. I prefer it, however, for winter-blooming. For this purpose, plant either the bulbs or seeds, in pots or boxes filled with sandy loam or good garden soil, in August or September. The bulbs are so small that most failures arise from shallow planting. Place the bulb about three inches below the soil, and press firmly; water, and give plenty of sunshine and fresh air. As the plants come up and begin to grow, water whenever the earth seems to need it, and keep them in a sunny place or they will grow pale and spindling. Your labors will be rewarded by an abundance of rich blooms, delicate in texture, lovely in shape and color. When the blooming season is over, withhold water, and when the plants die down, place the pot in a dry place, or take up the roots and put away carefully until planting time.

I was very poorly supplied with pots at one time, so I took a small mackerel kit, bored holes in the bottom, put in some bits of broken brick, filled it with rich garden soil, and in the center planted a dark purple Heliotrope, and around the edge I planted Oxalis seed, an inch deep and four inches apart, watered and shaded until the Heliotrope was well started, then gave air and sunshine, placing it on the top shelf of my pit, and giving a weekly bath of ammonia water. In a short time the Heliotrope was a vigorous plant, with great clusters of dark purple blooms, and after a time the Oxalis, from their clumps of three-in-one leaves, threw up glorious clusters of canary-colored blooms that contrasted finely with the purple of the blooms above. It is astonishing what a graceful, beautiful thing one may make of a despised mackerel kit, by a gracious thought, a few gracious cares! Truly, this Heliotrope was a thing to The Shamrock would have stirred the patriotism, the religious fervor of every son of Erin and St. Patrick! That mackerel kit was one of my most envied possessions.

Let me urge upon all flower-lovers the cultivation and reverential care of this flower of St. Patrick.—W., Bryan, Texas.

THE ONION MAGGOT.—A neighbor and myself each secured an ounce of Danvers Yellow Onion, and prepared the ground and sowed the seed in the same manner, with one exception; he covered the bed with a good supply of coal ashes. The crop in both cases came up and looked well, until the plants were about six inches high, when my Onions became infested with the Onion maggot, and in a short time wholly disappeared. My neighbor never lost an Onion. The gardens are adjoining, the beds being less than a hundred feet apart. I attribute my neighbor's success to coal ashes.—P.

THE ORIENTAL POPPY.

Some persons have, or affect to have, a prejudice against the annual Poppy, but when once this perennial variety has been introduced into the garden, it does not fail to be warmly appreciated, as adding a peculiar and welcome brilliancy to the scene. The plant is of convenient size, and does not intrude upon the domain of other plants, but makes a compact, thrifty mass of its own, about two or three feet high. It grows readily from seed, blossoms the second year, although at first with smaller and more scanty flowers, and the third year it is fully established. After that, it behaves perfectly well, is hardy, has no enemies, and makes no pecu-



liar demands of any kind. If you need to transplant it, do it after it has done blooming, and the leaves have died down. Many persons have a habit of begging plants just when they are in blossom, a very natural time to desire them, but the worst possible time for any such change of location.

The Oriental Poppy has petals about three inches across, and the expanded flower is five inches or more in diameter. It is of a scarlet, or reddish orange, color, with a large blotch of glossy black at the base of each petal, and a thick, rich purplish-black fringe in the center of the flower. Nothing can be more strikingly brilliant than these lustrous scarlet blossoms, which make the garden look as if it were almost aflame. No spot can be tame or commonplace where they are. The buds are very beautiful balls of bright green velvet or chenille, with the scarlet pushing through the calyx.

Artists are beginning to imitate these gorgeous flowers for panel decorations, and well may they wish to prolong the presence of this lavish bit of nature's coloring, which brightens up a room like an open wood-fire.—S. J. S., Newburyport, Mass.

BEGONIA FUCHSOIDES.

MR. JAMES VICK:—The Fuchsia-like Begonia, Begonia fuchsoides, is one of the best, prettiest, and most distinct of the Begonias. It is a native of New Grenada, from which country it was introduced in 1845, by Mr. Purdie, who discovered it in the Ocana mountains of that country. The plant grows two or three feet high, with a somewhat succulent stem, and alternate, smooth, oblong to ovate leaves, of a dark green color. The very handsome flowers are freely produced throughout the winter months, in long, pendant racemes, of a rich, scarlet color, and, when seen at a distance, they



have somewhat the appearance of a Fuchsia, from whence the name, fuchsoides, is derived.

A writer, in describing this plant, says: "Its small, but copious foliage is much eaten by the mule drivers of its native country to allay thirst; the globular buds contain a fluid which, together with the acid of the flowers, proves highly grateful in the dry season, and where there are no rivers."

The beauty of the foliage, combined with the graceful flowers and free-flowering, render it very valuable for pot-culture, vases, and floral decorations, and, as it is a plant of comparatively easy cultivation, I can most cheerfully recommend it to all.

To grow this desirable Begonia to perfection, give it a compost composed of two-thirds wellrotted sods, and one-third well-rotted manure, with some sand, or charcoal broken fine, well mixed. Do not sift the compost. Give a liberal supply of water, and, during the winter season, a temperature of from 65° to 75°, and an occasional watering of liquid manure will prove of benefit to it. About the first of June turn the plants out of their pots, cut them back about half, divide them if necessary, or if more plants are wanted, and plant them in a wellprepared border in a partially shaded situation. whence they should be taken up and potted early in September. For some, however, young plants would be preferable, so, for this purpose, strike some cuttings in March, and pot them off into three-inch pots as soon as rooted; keep them constantly growing, and plant out as above advised. The plants will have to be watered occasionally during hot, dry weather, and, also, should be kept tied to neat stakes, so as to prevent them from being broken off, and they should be pinched back occasionally if they show a tendency to grow out of shape. Good drainage is indispensable to the successful culture of this plant; so, for this purpose, first place a large piece of broken pot over the hole in the center of the pot, over this place several smaller pieces, and, over these, smaller pieces still, so as to fill up all vacancies; over this place a layer of moss, then place the plant in the pot; this quantity of drainage is necessary for a six or seven-inch pot, for smaller-sized pots do not use so much drainage. Of late I have been using sphagnum moss, chopped fine, and bone dust in equal parts, mixed with the compost above referred to, in the cultivation of Begonias, with very good results; in this case the sand is omitted.—CHARLES E. PARNELL, Queens, L. I.

BLUE FLOWERS FOR WINTER.

A word about Browallia Cerviakowski, which you wisely recommend as a pretty blue flower for winter culture. We have had abundant experience of Browallia plants in bloom at the windows from autumn to spring, contributing a most cheerful mass of blue in the midst of other flowers, and needing only common attention, with an occasional pinching off at the ends when they incline to be stalky, that they may throw out branches, which they will do by this means very generously. Yet we have known persons discouraged and thwarted by this easy, good-natured annual, because they did not know how to start it. Small as the seed is, almost fine as pepper, it often takes its own time about coming up from the earth. When it was

first known to us, we were shown a pot of Browallia as an unaccountable marvel. Some one had given the friend a plant which had done its duty, blossomed and died down, and lo! these plants which turned out to be a beautiful blue flower, had sprung up without any known instrumentality, having doubtless come from seed sowed by the former owner, who had given it up and planted something else in the same pot; and now the Browallia had come to the front, a charming surprise. So give your Browallia seed time to come up. Then do not expose the infant plants to a very hot sun, but keep them back in ordinary light until they are well started—an inch high, say—when they will run their own race, and to your complete satisfaction. As they seed well in the house, which many plants do not, you may be your own harvester after one success. They are also neat plants, staying in their proper place, and in no way incommoding any neighboring flowers in the same basket.—S., Newburyport, Mass.



FLOWER DE LUCE.

Still the water runneth
Through the meadow green.
Fair the Iris bloometh,
With sweet, noble mien.

Blue from sky of heaven, Gold from gracious sun, And rich royal purple Has the Lily won.

Dragonfly zigzagging, Body burnished bright, Lingers long beside her, Happy in her sight.

Rushes throng around her,
And their homage pay
To the fairest fair one
All the livelong day.

Flower de Luce! I love thee, Happy, watch with thee, By the river flowing Always to the sea.

-Rosa B. Watson.

WHITE FRINGE TREE.

There is the same difference between a shrub and an annual in our grounds, as between a friend and a common acquaintance. The latter may give us at times a great deal of pleasure. and be very welcome, but the other is permanent and steadfast, to be reckoned on at all seasons, to be counted among our treasures as securely in the dark and gloomy days as in midsummer brightness. A choice plant is the Chionanthus Virginica, the White Fringe Tree. or shrub, whichever it may be called, for its delicacy will make us class it among the shrubs. even after it has attained the height of a small tree, or nearly twenty feet. It has glossy, rich. green leaves, about six or seven inches long. which make it valuable in spring and autumn; but in the season of blossom, May or June, it is something which one grows enthusiastic over. and all who see it are delighted. Then it is covered with bunches of fringed white blossoms, which make the botanical name, Chionanthus, meaning a snow flower, or the common one of Fringe Tree, no misnomer. The flowers are of exquisite beauty. They hang in long, drooping racemes, pure white, with narrow, fringe-like petals.

If the Fringe Tree is exposed to very bleak winds, it may need a little protection for the winter, but it bears common exposure. The best soil for it is a light loam. It grows easily, but it does not propagate very freely.—S.

MILDEW ON ROSES.

The Journal des Roses has borrowed another man's thunder. The remedy which it has discovered for mildew on Rose leaves, (given on page 216 of this MAGAZINE) was recommended by Mr. PETER HENDERSON, in his Practical Floriculture, at least twelve years ago, with instructions how to prepare the compound. The receipt is, "boil three pounds of sulphur and three pounds of lime in six gallons of water, until it is reduced to two gallons; allow the liquid to settle until it is clear, then bottle for use. One gill of this to be mixed with five gallons of water, and syringed over the bushes in the evening."

Few, if any, plants are subject to as many diseases and enemies as the Rose, and of all of them there is none so persistent and so difficult to contend with as mildew. The above preparation is said to be a remedy, but it is not. When once a branch is affected, it may as well be cut off and put out of sight, as it never again during the season will recover its beauty. I have, however, satisfactorily established that the solution recommended by Mr. HENDERSON

is a preventive. I have a fine specimen of the General Jacqueminot Rose, which hitherto every July became a disgusting object. This year I have diligently sprinkled it three times a week with the sulphurated lime water, and as yet no symptoms of mildew have appeared, while other Rose trees in the vicinity, treated with the compound, but with less regularity, have been seriously attacked.

I may here mention, incidentally, that I was singularly successful in preserving my everblooming Rose bushes during the past formidable winter, by the adoption of the system which I recommended in one of your last autumn numbers. I lost but one bush out of about fifty.—R. O'HARA, Chatham, Ontario.

IN SUMMER TIME.

Under the trees in the noontime I lie, And we whisper together, dear Nature and I.

Over my head, in the wide azure arch, I see the cloud-armies go out on a march.

Here is a straggler, and there a recruit, Both clad in the white of the cloud-soldier's suit.

I see, flying up from the green earth below, A messenger-bird, bearing tidings, I know,

To the sentinel clouds who are watching the world From the crags where the flags of the sky are unfurled.

The wind whispers softly a secret to me:

It has seen the first Rose of June kissed by a bee.

And I see its bright splendor flash out on the spray A little red world that will last for a day.

The mother-bird broods on her wind-rocked nest, And twitters a song from her down-covered breast

Such as never is sung, except by the birds—A song far too sweet to be e'er caught in words.

The bees are aswing in the sweet-freighted bells Of the odorous Honeysuckle, bright Pimpernels.

The Robin is rocking, too lazy to sing Or put his head under his soft, dappled wing.

Rocking and swinging, and, just now and then, He chirps to his mate, and is silent again.

I hear the roots growing, all hidden away, While I lie still and listen this beautiful day.

I hear, as from dreamland, a tinkle, so low, Of silvery bells when the light breezes blow.

The lowing of cattle comes down from the hills, And blends with the ripple of wild laughing rills.

And listen! for here the brown crickets hide, Rehearsing a concert for next eventide.

The air is perfumed with the scent of the grass. That the mowers are cutting in swaths as they pass.

There is deep silence here, that is yet full of sound, And it seems that the world is enchanted ground,

Where never a grief nor a woe may e'er tread, But peace, like an angel, its blessings o'erspread. I hear in the music of book and of bird A language that knows no loud-spoken word.

For it flows from the kind, loving heart of our God, And his hand has fair traced it on tree and on sod.

I think, while the Robin awakes us and sings Of a thousand good, joyous and peaceful things,

I would be a bird, to be up and away, And sun my glad wings at the fair gate of day.

I would be a cloud, to go floating afar, And bathe in the light of the bright evening-star.

I would be a wind from the far, far-off south, To bear a warm kiss to a dainty, sweet mouth.

I would be a bee, and would woo a young Rose Till its own fragrant heart it should freely unclose.

Oh, days of midsummer, so full of sweet rest, Oh, dreams, that are only but dreams at the best,

I would keep you here, but it may sure not be, Since work, and not dreaming, is waiting for me.

But the memory stays, when the bright summer goes, Of its birds, and its bees, and its sweet-smelling Rose.

And in winter, in dreams I shall then have them all, Forgetting the days that are dreary in fall.

—EBEN E. REXFORD.

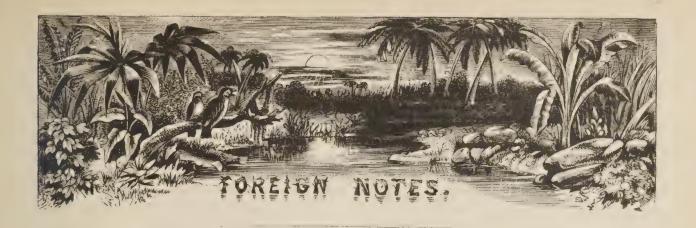
THE JASMINE-LIKE SOLANUM.

I wish to call attention to a climbing Solanum which I have now cultivated for several years, and with the happiest results. In the catalogues this plant is mentioned as Solanum Jasminoides. It is a pretty determined and self-reliant little creature, although it appears to



SOLANUM JASMINOIDES.

need some support, but you may be very sure it would support itself if necessary. It is not hardy in this climate, though it undoubtedly is so at the south. It should be potted in a fair-sized pot in rich loam, and it will then grow and bloom profusely all winter, in the window or in the greenhouse. The flowers are pure white, small, a half-inch, or a little more, in diameter, and of the well-known shape of those of the Solanum family.—S. C. W.



HOME-MADE MANURES.

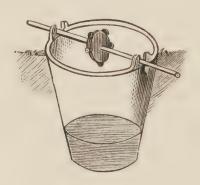
We copy below, from the Gardeners' Chronicle, the interesting statements of J. Rust, gardener at Eridge Castle, Scotland. There is in them nothing new, but the facts are so well stated, and are drawn so directly from personal experience, that they can hardly fail to incite our readers to look more carefully to resources within their control, and to utilize, as manures, products that often are allowed to go to waste, and which, in many cases, are a fruitful source of disease.

"I have long had great faith in soot as a manure, and have here a covered box placed near the castle into which the sweep puts all the soot from the chimneys and flues from time to time; this, in the course of the year amounts to an incredible quantity of manure, and very handy and useful we find it. When a piece of ground is dug we give it a dressing with soot, and then, in gardening phrase, 'break it down' for the crop; this really means running a harrow or rough rake over it, and it mixes the soot with the soil nicely, and the result is always satisfactory in the crop. Last year our Onion crop showed unmistakable signs of the maggot; I immediately had the piece dressed with soot. Heavy rains set in just after, and soon the Onions were on their legs and the maggots were gone. The rain-water from off the roof of the kitchen runs into a tank, and is heavily charged with soot. This is handy to the flower-garden, and we find it capital for watering flower-beds in summer. The park one autumn had a lot of what the country people here call 'old toar'why I know not, but it means a lot of old, coarse grass-a good dressing of soot in the spring, and it soon gave place to fine, young, fresh grass, and ever since the deer and Highland cattle may be found at pasture on this brow. While I am on this subject of homemade manures, allow me to mention a few others, and the next shall be ashes, more especially wood-ashes. This is invaluable in a garden if kept dry till used. We all know what a terrible plague 'the club' is among the Brassica

tribe; well, if the seed is sown on the surface and covered with ashes, and at planting time a hole, with a large dibber, is made in the ground and filled with the ashes, inserting the plant into this, I have never known the club to trouble one, and it is the very best thing to dress lawns and meadow lands, encouraging the best grasses and clovers. In a woody country like this there is plenty of charcoal dust at the bottom of the heap; this is most useful for potting or fruit tree border making; some say it makes Grapes extra dark in color—this I cannot positively be sure of, although I rather side with the belief. Lime is not nearly enough used in gardens. Every bit of ground should, in my opinion, be limed once in five years; it kills slugs and insects and lichen on trees, and acts chemically on the ground, and is often better than manure for certain crops. I remember once seeing ground dressed in the grey lime produce Barley fifty-seven pounds per bushel. Horse-hoof parings make a most excellent manure for potting Pines, vines, Pelargoniums, &c., and one can easily make arrangements with the nearest blacksmith to save them. When one reads of horn shavings being run after, I often think there are as good at the village forge. Bones are most valuable in a garden, they decompose but slowly, keep the ground open, and are invaluable in vine border-making. The champion bunch of Grapes shown at Edinburgh some years ago, weighing over twenty-six pounds, did the clever gardener who grew it great credit; but it should also be known that there were heaps of bones in the border. A gardener, whom I had got a good situation for, took it into his head to send me a couple of The geese were geese at Christmas time. eaten, no matter when or where, but the bones were saved; these, with some others, were put into the bottom of two vases on the terrace wall, two good plants of Tom Thumb Pelargonium were planted in them, and at the end of September they measured seventeen feet and six inches in circumference. So much for bones and plenty of water."

GARDEN MOUSE TRAP.

In some places mice do a great deal of mischief in gardens, and those of our readers who may be annoyed in that manner will be pleased to learn of the following effective mode of trapping the little animals. The inventor of this trap tells his story of it in Gardening Illustrated, and says the trap was "eminently successful, for we trapped them by hundreds. I instructed the potter to make me a number of glazed pots about the size of a twenty-four-inch pot, but two inches or three inches deeper. There were four projections on the upper edge, as shown in the sketch, each pair being placed one and one-half inch apart. The pots were only glazed inside. The rest of the apparatus consisted of a round stick three-fourths of an inch in diameter, on the center of which was fixed a turned wooden roller three inches in diameter and three-fourths of an inch thick; the round stick, being five inches longer than the diameter of the pot, and projected two and one-half inches over its outside each way.



Four or five baits were fastened on the edge of the roller with tin tacks; the baits consisted of either cheese or bacon-rind, or garden beans. Thus baited, the stick was laid between the projections on the rim of the pot, with the roller exactly in the center. The pots were half-filled with water and sunk in the soil, so that the stick, when in position, cleared the ground about one-eighth of an inch. A mouse endeavoring to get at the bait has to travel along the stick to the roller, but cannot reach the bait without rising on the roller; when it does this roller revolves, the mouse loses its balance, and is precipitated into the water, leaving the trap ready set for others to follow. The dead mice should be taken out every morning and the roller removed to be replaced in the evening, for birds sometimes dislodge the baits during the day. A little more water must be put in the pots as required. As many as nineteen mice have been drowned in one of these pots in a single night."

Instead of having a pot made specially for the purpose, it would be quite as well to use a common earthen jar with straight sides. A couple of bearings for the shaft to roll in could be made of tin by the tinsmith and placed over the edge of the jar.

PATIENCE NECESSARY WITH SOME SEEDS.

A writer in the Journal of Horticulture in May, thus gives his experience with a few kinds of seeds: "A few days since I sowed some valuable Primula seed in pans; and the remainder of the package, which I considered would have made the seed too thick, I put separate. The seed germinated, and in the pans that were slightly covered with moss, which acted as a shade and retained moisture, the seedlings escaped, while the others while moist were caught by strong sunshine and destroyed. The same thing happened to Godetia Lady Albermarle and Browallia elata, which I put outside when the weather came moist and genial a week since. Buying expensive seeds, going to much trouble preparing composts, sowing, and watching for a suitable temperature—all this may be wrecked at a critical moment if persistent attention is not maintained. If kept in a moist frame with a heat not exceeding 65° except from sun heat, and with moss spread on the surface of the pot or pan or a sheet of whitened glass, little watering will be necessary. Watering from a large rose, and especially with hard water, such fine seeds as Tuberous Begonias, Show Auriculas, etc., would be instant death, besides scattering the soil on all sides. Many are uneasy when they do not see such plants as those named coming up rapidly in a fortnight or Many of the hardier florists' flowers, even Carnations, Primulas, Pansies, etc., take months before the whole of them have germinated. Geranium seed I sowed in January are still germinating. Primrose and Polyanthus seeds, especially if dried or kept long without sowing after gathering, will often remain six months before they germinate.

At present I have a quntity of Primula japonica sown last October just coming up—seven months after sowing, and the seed was taken off the heads of the plants fresh. I should strongly recommend amateurs to gather seeds from any novelties that come under their notice, and sow it as soon as ripe. Very few seeds improve by keeping. There are a few vegetable seeds, and I believe Asters, that a year's keeping will not injure—rather give a stocky and more compact habit of growth; but the reference to sowing as above indicated applies to rare plants, and implies that you have the means of keeping them over the winter if necessary, as the autumn is the general season when this recommendation can be taken into effect."

TUBEROUS BEGONIAS FROM CUTTINGS.

A practical gardener, D. T. Fish, has supplied the following communication to the Garden in relation to the propagation of Tuberous Begonias: "The leaves and stems of many of these Begonias being so soft and wooly, overclose methods of rooting the cuttings should be avoided. Hence bell and other glasses are better dispensed with, and also all excessive shading or over-closeness. A house or pit commanding a top and bottom heat of from 60° to 70° is the place to root the cuttings in. I am aware that the plants vary very much in hardiness, some being absolutely hardy, and others thriving best in a stove temperature. It has also been affirmed that the rounder and smoother the leaves, the more hardy the varieties and vice versa, and it would be interesting to learn the experience of your readers on this point. But for mere purposes of propagation, it is not needful to classify Tuberous Begonias into hardy or more tender. They all root freely under such conditions as are here specified. The cuttings should be kept rather dry till rooted. The atmosphere should be sufficiently moist to prevent the leaves flagging. This attended to, but little water will be wanted in the soil till the somewhat fleshy stems begin to form roots. Pure sand over a base of broken potsherds or charcoal is the best rooting medium. It is a mistake to mix soil with the sand for the rooting of such cuttings. All that the cutting needs is a moist porous medium to root into. Until the latter are formed, it neither needs nor can absorb food of any sort from the soil. More cuttings are killed by attempting to feed them before they are rooted than by any or all other means put together.

As soon as the cuttings have rooted or become plants, they may be potted into light, rich soil; that composed of equal parts loam, peat, and leaf-mould, with a sixth part of silver sand forms a good compost for Tuberous Begonias in pots. Others use richer composts, but it is preferable to give all needful stimulants in a liquid state, and not till the plants need them. From this it will be seen that the best time to insert these Begonia cuttings is in the spring, or at least in an early state of growth of the plants. But as, where large collections of these magnificent pot, bed, or border flowers are grown, batches will be started at different times, so their propagation by cuttings may take place at any period when the growth is in the most favorable condition. Thus, choice seedlings may often throw up, or out, proper shoots for forming bulbs, and these should be selected, converted into cuttings, or rooted at any season when they can be procured. This is the more necessary with choice varieties, as very few Begonias can be depended upon to reproduce themselves quite truly from seed. For general decorative purposes, however, in beds or borders, seedlings are the easiest raised, and where the strains grown are good they are sure to be of sufficient merit to produce brilliant effects. Even the element of novelty and the constant expectation of something superbly beautiful that is likely to turn up among the seedlings add a new interest and charm to their cultivation either out-of-doors or in.

A VALUABLE LIQUID MANURE.

A writer in the Journal of Horticulture, gives what he considers a very superior method of making a liquid manure with soot and stable manure. A good cask is employed and also a smaller vessel, like a half-barrel, or something even smaller, with loose, open joints through which the water will pass. The latter, after it is filled, is intended to be placed in the cask, and the space surrounding it to be filled with water. Take the half-barrel and put in first a spadeful of manure and pack it closely down to the bottom and around the sides, so as to form a cavity that will hold a pint or more of good soot from the top of a chimney where coal fires are kept burnt; next add another layer of manure, pressing it close round the sides as before, then more soot, and so on until full, when a plate or tile should be placed upon the top to prevent it floating. Now insert this in the cask. The smaller vessel may be supported at the height of the cask by bricks placed on the bottom of the cask, or by a pair of handles, consisting of two straight sticks securely fastened at its top and by which it may be carried. Fill up the cask with water, let the smaller vessel remain for three or four days, lifting it out a few times during the interval to drain; then lift it out altogether, and support it on two sticks across the top and pour a few canfuls of fresh water to wash out by displacement the manure left in it, and when sufficiently drained the contents may go back to the manure heap for further decomposition, or be made use of in any other way.

The solution thus obtained forms the stock pot, and may be diluted to any extent according to circumstances. It may be used either alone of almost any strength, or it may be further enriched by the addition of about a teaspoonful of sulphate of ammonia to each gallon of liquid. Or, on the other hand, a very good substitute for guano will be formed by introducing a solution of chloride of lime in the place of the ammonia. The chloride solution is made by adding two ounces of the dry pow-

der to a wine bottle, twenty-four ounces of water, shaking well up several times before using. From one-half to an ounce of this liquid to be added to each gallon and given to Stocks, Primulas, Primroses, and numerous other soft-stemmed plants, will be found highly efficacious."

THE APPLE TRADE WITH ENGLAND.

The Garden of June 11th says: "In speaking to Mr. WALTER DRAPER, of Covent Garden, the other day, of the state of the packing of the enormous number of Apples coming to us from America during the past season, he referred to the great loss and disappointment incurred from bad packing, brands found to be deficient in that way being loaded by the purchaser. He said there would be no objection whatever to the Apples being classed, and that sales could be readily found for more than one class, but the ones, twos, and threes should be rigidly and conscientiously separated, and kept so in the barrel. The Canadian Apples are much better. As it is to Mr. DRAPER'S firm that most of the Apples coming to the London market are shipped, his opinion may be worth mentioning to our American readers."

Comment on the above is unnecessary, for every one can see how certainly our orchardists will be the loosers, unless their trade is characterized by strict honesty.

THE LILY OF THE VALLEY OF THE BIBLE.

WALTER ROBINSON, of The Garden, says that, "according to the best authorities, this was the purple Iris, the 'Fleur de Lys,' a plant ever considered sacred to the Virgin Mary. Most among us, however, from childhood have erroneously associated the Bible reference to the flower that 'toileth not and spinneth not' with Convallaria majalis, our Lily of the Valley, or May Lily, one of the most fragrant and characteristic of the flowers of the month, but, which indeed is rather an alpine than a valley plant, naturally growing under the shade of the woods which clothe the flanks of the great mountains. The early tradition attached to the purple Iris has been transferred in this country to this one, Lily of the Valley, whose flowers are said to be 'Virgin's Tears.'"

LILIUM MARTAGON.—The Gardeners' Chronicle makes this curious statement of the Martagon Lily: "A specimen of this, the leaves of which were of the usual green color when we received it, was laid aside for several days in a tin box, and, when again looked at, the leaves were seen to have assumed a violet-purple hue, like that of the flowers."

USE OF FLOWERS IN EUROPE.

On the occasion of the funeral of the Earl of Beaconsfield, as many wreaths as would fill a wagon are reported to have been sent to the residence, for the purpose of placing on the bier.

As an instance of the employment of flowers at weddings, one of the most noteworthy is that of the marriage of the daughter of the King of the Belgians, the Princess Stephannie, to the heir of the throne of Austria. The offerings of the public of the City of Brussels consisted of bouquets, and these were so numerous that four wagons were necessary to remove them to the palace. The wedding festivities on this occasion, at Vienna, demanded so many flowers for the decoration of the city that all resources failed to supply half the orders.

A PUGNACIOUS TOAD.

A writer in The Garden says: "One day, while gathering Violets out-of-doors early in spring, I came suddenly upon a large toad squatted in the middle of the plants. Until Shakespeare taught me better, I always thought toads horrid creatures, and almost shuddered when they came across my path. However, observing and admiring the jewelled eye as bravely as I could, I selected one of the largest leaves with a long foot-stalk, wishing to drive the creature away, when, to my great astonishment, it regularly sprang at me, leaping upwards toward my hand, with mouth wide open, the tongue rapidly jerked out with a slight noise. I was so unprepared for the challenge that I dropped the leaf, found that I did not want any more Violets, and settled in my mind that so large and indolent-looking a toad was, when disturbed ever so little, quite able to hold his own place and show most pugancious manners."

Daisy Fleabane.—Those of our readers who are familiar with the Daisy Fleabanes may be surprised to learn that a reddish-orange colored species has recently been discovered in the mountains of Eastern Turkestan. The plant has flowered at the Kew Gardens, and is described as a "neat, dwarf-grower, with a scape about a span long, bearing a solitary, large flower-head, of a charming reddish-orange color. It is named Erigeron aurantiacum."

A POETICAL NAME.—The Sensitive-leaved Oxalis, O. sensitiva, a native of Central Africa, is called, by the natives, by a name which means, "His father has died;" thus associating, as we also do, the phenomenon of movement in the plant with mental sensations in human beings.



A PRAYER.

The sun has sunk behind the hill,
The bird's faint song still fainter grows,
A softer murmur takes the rill,
The fragrant leaves of garden Rose,
And Pink, and Lily gently close;
The glancing night-moth hums among
The Four-o'clocks that often keep
When all the other flowers sleep—
And in the purple, evening skies,
As pale as pearls, the stars arise.
Night comes, and all the din of day
Before its coming dies away.

Oh! when my moments numbered are,
Dear God, and life is nearly done,
Grant I may then behold the star
Of Bethlehem—that radiant one—
When I turn from the setting sun.
And may the birds be singing then
From every leaf-embowered nest
A welcome to the hour of rest,
And night's own blossoms, wondrous rare,
With sweetest breathings fill the air,
As with the day's declining light
My weary spirit takes its flight!
—MARGARET EYTINGE.

STRAWBERRIES.

The amount of fruit that a vigorous Strawberry plant produces in proportion to its size and weight probably exceeds very greatly that of any other kind of plant. This remark is made without any claim to accuracy, and without ascertained facts to establish it. One cannot, however, fail to recognize the disproportion between the weight of a Strawberry plant and its crop of fruit, especially when compared with most other plants, a Cherry or a Plum tree for example, or a Chestnut or Hickory tree. It is probable that the Banana, in this respect, will compare well with the Strawberry. As might be expected, a plant that produces such remarkable results can continue in this course but a short time. The first full crop of a Strawberry bed or plantation is the best; the second crop is very much inferior, both in the amount and in the size of the fruit, and after these crops have been taken the plantation is not usually considered worthy of further culture, but is dug or plowed under.

Amateur cultivators are apt to fail in making

timely, successive plantings, and thus providing for an abundant supply of this first summer fruit. As soon as the fruiting season is past, the spaces between the rows should be spaded and raked, to allow the vines to run over it and root new plants therein. In this way a bed may be renewed, by allowing these young plants to remain and digging in the old plants; this course can be pursued after the second season of planting. But the year previous the young plants can be removed and transplanted into new beds. It has been found a great advantage to provide small pots for the little plants to root in; by this means they can be removed and turned out of the pots and transplanted with the balls of earth entire, and the roots undisturbed. As a result the plants continue their growth uninterruptedly and become strong enough to produce a very fair crop the first spring. The pots are first filled with prepared, rich soil, and then plunged in the ground at the proper places, so that the runners can be imbeded in them at a joint and fastened down by a peg. This course could always be pursued when only a few hundred plants are wanted. The advantages it offers are worth all the necessary labor, and even large planters are practicing it, raising thousands of plants in this manner.

Stawberries in the garden ought to be alternate crops with vegetables. It is a mistake to assign them a special plot in the fruit garden, and thus confine them for years to the same bed. Two years, or long enough to produce two crops, should be the longest time allowed them to remain in one place. The soil for Strawberries should be rich and mellow.

Plants that have been raised in pots may be turned out of their pots and set in the ground without breaking the ball of earth; but those raised in the ordinary manner should have the soil removed about two inches deep, and from a space sufficient to take in the roots without crowding. The hollowed space should be at least eight or ten inches in diameter and a little crowning at the center, on which the base of the

plant is to be placed, and the roots should be spread out straight in all directions. Fill in fine soil and press it well down with the hands, leaving the crown of the plant just at the surface of the ground.

Fall-planted Strawberries should be planted as early as possible, but the summer droughts usually prevent the young plants making sufficient roots to transplant well before September; in this month they should be put in as early as possible, and with favorable weather will make sufficient growth to enable them to winter successfully; but August is a preferable time if the plants are suitable. For the garden, the plants may be set in rows two feet apart and a foot or fifteen inches apart in the rows. If the weather is dry, water immediately after planting, by pouring a little water around each plant, and if the plants should wilt they should be provided with shade of some kind—a flower-pot, a large leaf, or a handful of grass, with a little soil placed on the ends to keep it from blowing away. After three or four days, even in a warm, dry time, if the plants are kept watered, they will be able to bear full exposure, though, if the weather should continue quite warm, it will be well to mulch the plants with grass, leaving the foliage exposed. As soon as the plants start to grow, it will be proper to hoe; the ground should be kept clean and mellow.

Before freezing weather sets in, the plants ought to be provided with a covering for winter, to prevent their being thrown out by the frost; clean straw, coarse hay not containing weeds and weed seeds, brake or bracken, or other Fern fronds, or similar, clean, dry material, is suitable for the purpose. In the early spring the covering should be removed, and may be left as a mulch between the rows.

The present time is prolific of new varieties of Strawberries; many of them are very meritorious and some are especially promising. Bidwell, President Lincoln, Mount Vernon, Warren, and Longfellow may be mentioned among those that give the highest promise. But the amateur may well rest content, for the present, with such sorts as Triomph de Gand, Sharpless, Crescent Seedling, and Downing, whose worth is well established. Large growers are testing many new kinds, but most of them yet hold on with one hand to Wilson's Albany. We hope they may yet find it to their advantage to drop it and supply the market with better fruit. Crescent Seedling appears to have established its reputation everywhere of being so hardy as to be entitled to the appellation of "iron clad," and of being very productive, but it is of only medium size and not above average quality.

THE LEEK.

JAMES VICK:-About one yeur ago last spring we ordered some Leek seed, which were sowed and came up finely. Early last spring I thinned them out and reset, expecting them to multiply, but, much to my surprise, they have not multiplied any, and have not gone to seed. Will you please be kind enough to let me know how to cultivate them, or any information as regards taking care of or handling them in the future will be thankfully received. It is a vegetable almost unknown here, and one that I am particularly fond of. I have only resided here about two or three years, having lived in Louisiana, where the Leek-bed was considered a treasure, as they came on so much earlier than other vegetables in the spring. My recollection is that where one was set it multiplied, making quite a bunch, which were pulled up and used, always leaving one in a place. I am raising the Potato Onion, which multiplies, but it is entirely different.—R. J. B., Columbia, Mo.

The Leek does not multiply at the root, like the Potato Onion. Every plant is grown from the "black seed," and after reaching maturity, commences to go to seed, like the common Onion. The Leek is valued on account of its hardiness and its mild flavor. It is most prized in countries where soups are used freely, as it is considered better than Onions for this purpose. The Leek is also very nice when boiled and served as Asparagus. In tolerably mild climates the Leek may be gathered from the ground all winter, but must be removed in early spring or they will go to seed; but in cold climates they are gathered in the autumn and stored in the cellar, in earth or sand. The seed is sown in the spring in drills, and as the plants grow the earth should be drawn towards them, so that, in autumn, about six inches of the stalk will be blanched white and tender. Some cultivators make trenches, as for Celery, six inches deep, and in these sow the seed. This plan makes the hilling-up easy. In Europe the Leek seed is generally sown in seed-beds in the early spring, and transplanted into a very rich soil when the plants are large enough to remove. The Leek forms no bulbs, but has a long, thick neck, like a scallion. The seed is similar to Onion seed, only smaller. It is a favorite vegetable in all southern countries.

SMILACINA STELLATA.

W. FALCONER, Curator of the Botanic Garden, Cambridge, Mass., says that this common native "is not a showy plant, still it flowers quite prettily in May, when the Violets and Trilliums are in bloom. What I admire about it is, it will grow under heavily-shading trees right up to the base of their trunks, and that, too, in dry places. There are not many plants that will do this. Many will do it if the surface of the ground is moist, rich, and loose, but when bare, hard, and dry, this Smilacina has not many rivals for such a purpose."

A PRAIRIE ORCHID.

MR. VICK:—Kind friend, accept very many thanks for the flower seeds sent us. They promise an abundant bloom, and will afford my scholars a great deal of pleasure.

A few evenings ago my Indian girls, in bringing me prairie flowers, brought me one more beautiful than any I had ever seen, and very fragrant. The perfume is similar to the Tuberose. This morning I had them pilot me to the place where they found it, and we removed to the garden several plants already in bloom, to see what we could do in the way of cultivating them, and marked others, so as to be able to take them after the flower-stem dies. Thinking on account of its appearance and fragrance it may prove valuable, and being unable to find out what it is, or give it a name, we send to you by to-day's mail a specimen complete. Will you please tell us what it is?—Mrs. R. K., Matron Wyandotte Mission, Ind. Ter.

The plant here described is the Greenish Fringed Orchis, of GRAY, Habenaria leucophæa. A happier name for it is that of Wood, who called it the White Prairie Orchis. We hope success may attend this effort to cultivate it. As the plants inhabit low, moist places on the prairies, it will be best to mulch them in the garden by spreading a covering an inch or two thick over them of grass, or other suitable material, and to give water often enough to keep the soil constantly moist.

RAISING PLANTS FROM CUTTINGS.

MR. VICK:—Will you please tell me what time in the season I must plant cuttings from Fuchsias, Heliotrope, and flowering Begonias for winter-blooming?

In what manner do you take cuttings from flowers?



GERANIUM CUTTING.

HELIOTROPE CUTTING.

What kind of soil do Verbenas want, and at what temperature, to bloom well in the house?

My Lilium auratum is in bloom. It is very large, but the stalk is only a foot high. All who have seen it think it beautiful.—S. D. W., Martinville, N. J.

Cuttings of most of the soft-wooded green-

house plants can be made at almost any time during summer, and, if well cared for, will come into bloom during winter. The months of July and August are particularly favorable to striking cuttings in the open ground in the garden. At that time the soil is warm and all con-



FUCHSIA CUTTING.

ditions favorable for the cuttings to take root. When cuttings are to be made, a piece of stem or branch should be selected that is mature, but not yet hard; if too young and sappy shoots are used they will be apt to wilt and wither away, or to decay, or damp off, as gardeners say. 'A leaf or two is left on the upper end, and the whole cutting made two or three joints long, cutting it just below or above the base of a leaf. It is still common to make the lower end just beneath a leaf, but the best gardeners have generally abandoned this practice as useless, especially with soft-wooded plants. The engravings show several cuttings as our propagators are accustomed to make them.

A piece of ground should be prepared soft and mellow, or else boxes of sand about three inches deep be used to insert the cuttings in. It is best to take advantage of a cloudy day if possible, but if not, the bed or boxes can be shaded with paper after planting, if the sun is hot. After a day or two the shading can be removed, and the only attention necessary afterwards will be watering, if the weather should prove dry. A good variety of flowering plants and shrubs can be raised in this way.

To KEEP SEEDS FROM MICE.—The Druggists' Circular says: "To keep seeds from the depredations of mice, mix some pieces of camphor with the seeds. Camphor placed in drawers or trunks will prevent mice from doing injury.

WINDOW-PLANTS IN WINTER.

MR. JAMES VICK :- A friend of the Quebec Young Men's Christian Association admiring the beauty of the plants in the building, subscribed for your MAGAZINE, thinking that, as young men visiting the rooms would see the plants, they might be led to a deeper interest in flower culture. When, in 1880, the Association moved into its present beautiful home, I brought with me from my private residence some plants radiant with blossom. I had formerly only three windows that I could use for flowers, and these had a southern aspect; but I think no one was ever more successful with plants in winter than I, for from November right through in this bitter climate, I was never without blossoms; and the comfort those flowers were to me I can never tell. How often they were a rest to my weary brain, just to tend them for a few moments, and then off again to my work. Every one of them was of my own rearing. We moved into the new building in April, and a day or two after we were in, Colonel RHODES, a gardener of some note here, came to visit the building. Upon seeing my flowers, he asked who had tended them, and when I told him they had been my care, he at once said that any person who cared for flowers so well should have his office carpeted, and gave me orders to purchase as good a Brussels carpet as I could for my office, he paying nearly sixty dollars for it. All last winter in this building I had rare plants in point of greenness and beauty of foliage and shape, but I got no blossom. I cared for them myself as well as ever; they repaid me in growth and were the constant admiration of every person visiting us, but, as soon as blossoms would appear they would begin to unfold, and then turn yellow or black and die off. I have fourteen windows twelve feet high and five feet wide, all having a southern aspect, and I have nine windows of the same size with south-western aspect, but I could obtain no flowers. We heat with hot water, and our ordinary temperature in day time in winter seldom falls below 65°, and on cold days was above 70°, and at night cooled down to 56°. I kept the plants well watered, used guano as usual in winter, had, as I say, lovely plants, numerous Geraniums, but not a blossom. Begonias, which always blossomed with me in winter before, remained green and beautiful, but no flower. Chinese Primroses the same, and English Hedgerow Primroses the same. In fact, all failed. Why? Was it the gas? I had no gas in my old house. Was the air too dry? I usually watered night and morning, and never with cold water; of course, I regulated this matter according to the need of the plants. If they were not dry I did not water them, but, on an average, twice daily, morning and evening, they had water. Fresh air I tried to give them whenever I could, by opening the ventilators at the bottom of the stormwindow, and then closing the lower inside sash and pulling down the upper, so that no direct draft came upon my plants. I had about one hundred and fifty pots in the house. Now I have a lot of plants out in the yard. where I intend to treat them during summer, just as I used to in my former place, and, of course, hope for success, because I think the beauty of having indoor plants is to obtain flowers in winter, as we can, during summer, buy for a few cents as many as we need. At the same time, when I went out and saw ugly, straggling, crooked plants blossoming in windows in various parts the city, I felt I would not part with my shapely, rounded, beautiful plants without blossoms for crooked sticks with flowers. Can you tell me how I can secure flowers the coming winter? I think I shall place bowls of water in the windows among the pots, but whether that will do any good I do not know. I may say the rooms in which my plants grow are eighteen feet high, and one of them is 45x45, the other rooms are well proportioned. I have gained many hints from the MAGAZINE already,

but I would like to be gratified with some blossom this winter, if spared. I have written more than I intended when I began, but if, before autumn, you can give me a hint which may be useful to such cases as mine, I shall be very thakful.—Thomas S. Cole, Quebec.

The case here presented is a peculiar one. The success in raising the plants is very marked; they thrived under the treatment they received and yet perfected no flowers. If plants of only one kind had exhibited this feature, for instance the Geraniums, or the Chinese Primroses, we might with much reason suggest that the mean temperature was too high, which undoubtedly was the case, but since Begonias are mentioned, which one would hardly expect to resent so emphatically a few degrees more of heat, the case becomes somewhat troublesome to determine. We are not informed what species or varieties of Begonia were employed, and if they were only those that require the coolest treatment, then we may safely conclude that the principal reason for barrenness was to high a temperature connected with a free or full supply of nutriment. Less water, no guano-water, or at least none until the flowering season had fairly commenced, and a temperature averaging about 10° lower are conditions in which the plants would very probably have bloomed freely.

We would suggest that one or two of the windows be enclosed with sash hung on hinges so that they can be opened into the room; in this way the windows can be closed just as much as is necessary to maintain a regular, low temperature, in the daytime keeping them more nearly closed than at night.

A collection of Chrysanthemums, grown in the open air during summer, and taken in the last of September with their flower-buds formed, we think, would hardly fail to bloom during the fall months. Roman Hyacinths, potted early and set away in a cool, dark place until the pots. are well filled with roots, and then placed in the windows, would unquestionably show themselves about the first of the year. So, Hyacinths and Narcissus, and Duc Van Thol and Tournesol Tulips, Crocuses and Snow Drop will all respond in time. The Calla, Richardia Ethiopica, should be well represented in the collection. Cyclamen Persicum and Chinese Primrose ought to give an abundance of bloom if temperature is not kept too high. The Laurestinus, Virburnum tinus, Rhynchospermum jasminoides, Deutzia gracilis, Oxalis floribunda, alba, and rosea, and Chinese Hibiscus, may all be confidently used for winter-blooming, and with the other plants usually found in windows, should afford an unfailing supply. We trust our correspondent may be able to report differently the next spring.

GARDEN TROUBLES.

I cannot find anything in the MAGAZINE, although I have looked over them all carefully, about the Flowering Currant, and as I want to know something about it, I have come to the conclusion that I had better apply to the editor himself. I have two of the so-called shrubs in my garden, which give me, in early spring, a number of pretty, yellow flowers with a delightful clove-fragrance, and after that berries somewhat resembling the Gooseberry at first; but, as my maid from Erin, who was goose enough to eat one, informed me, not tasting at all, at all, like that fruit, I dun know." But in spite of the pretty, fragrant blossoms and the berries, first green and then black, these shrubs are not "things of beauty," and consequently not "joys forever," on account of their awkward, straggling habits. They shoot up long, pallid stems, that soon become top-heavy with leaves and droop in every direction in an aimless manner, ready to break off on the slightest provocation. Now, what I want to know is this. Is it because I have them in a damp, shady place? Would they become stouter, stockier, and more pleasant to gaze upon if removed to the sunshine?

And, if I may be allowed a suggestion, where everything is done so well that it seems impossible that it could be done better, I think if you would, sometime when you have nothing else to do (?), give the real, simon-pure flower-amateurs, those who are indeed in the primer of flower-culture, a little word and picture description of the first rough leaves of the plants they are most desirous of raising from seed, it would be of great benefit. I sowed a small corner of my small garden with Pansy seed, and smiled brightly when I saw a number of tiny leaves breaking through the ground in a few days. I watched them fondly, cherished them with care, to have them turn out-Chick weed? Then, having got rid of the Chick weed, some other wee leaves appeared, and them I also cherished, sure of Pansies this time; but they're not. Neither are they weeds; that is, I don't think they are. They are pretty, delicate, pointed-leaved things, and look like vines. Now, if I had known the first rough leaves of a Pansy by sight I should have saved time and trouble. Is the matter worthy of consideration?

The Cherry tree I planted two years ago last autumn shows, this season, a plume about large enough for my largest hat, and looks as though nothing was farther from its thought than Cherries. Several of the branches died last winter, and an old gardener, who comes to help in my garden now and then, cut off these branches a day or two ago, and, by mistake, also cut off one of the growing ones. Will the tree suffer in consequence? If it will, I give it up.

The leaves of some of my Currant bushes are puckering and blistering, and turning red, and though red is my favorite color, I do not like to see it usurping places lawfully belonging to green.

Is it right to trim a young Grapevine as late as the first week in June?—M. E., Bayonne, N. J.

The Flowering Currants are beautiful plants when in flower, and, though not erect in growth, they are not so lax and straggling as to be objectionable when in a good situation. They are much stouter when given the full sunshine. The oldest wood should be cut out each season and a supply kept up of young, vigorous wood.

If there were nothing else to do and no way of amusing ourselves, possibly the scheme proposed might be attempted, but we doubt if any one would be benefited by it. If seeds are sown in straight rows, it will be easy to tell which plants are the ones desired, and which the weeds.

It will be safe to make arrangements for picking Cherries from some other source than that tree. If a transplanted tree does not grow promptly and strong at once, there is very little hope for it; this is especially so with Cherry, Plum, and Peach trees.

The pruning of Grapevines should not be delayed until late in the spring, but we should not hesitate to prune judiciously, even in June. At so late a time the pruning cannot be as severe as when the vine is dormant.

POISON PARSNIPS.

MR. VICK:—There has been so much said concerning poison Parsnips of late, I wish to ask you if they cannot be grown with safety? Can seed be procured that is true, so no danger can arise in that manner, and if so, cannot the vegetable be grown without fear of the wild variety growing up with them? Can the wild Parsnip be distinguished from the garden variety, either when growing or when ripening its seed?—Mrs. F., Goldsmith, Ont.

We think that there must be some great negligence in the garden where wild, poisonous plants are allowed to grow. The common Parsnip, Pastinaca sativa, when allowed to run wild a few years, becomes acrid and poisonous. It is quite impossible to think that seed procured from any reliable seedsman and planted in a well-kept garden, or in any garden, will produce noxious plants resembling the Parsnip. If such plants are there, they must come from seed derived from other sources. There are several umbelliferous plants known as wild Parsnips in different localities, and the mere common name does not convey any precise idea of the identical plant. We can safely say that the chance of raising poisonous plants from Parsnip seed procured from reliable sources is not one in a million of cases. The notion of arriving at such a result through ordinary garden culture should be dismissed at once, it can happen only through some gross carelessness which it is unnecessary to point out.

REMOVING NYMPHÆA ODORATA.

MR. VICK:—Please tell us in your next MAGAZINE if Nymphæa odorata will do well if taken from the pond in full bloom, or soon after, and how it should be treated until spring, and oblige one who prizes your MAGAZINE.
—MRS. N. M. R.

It will be best to remove the roots of Nymphæa and other of the same family as late in the season as possible, and not at flowering time. The best way to treat them will be to place them as soon as possible in the spot where they are intended to continue their growth, whatever that artificial situation may be. If they are to be sent to a distance, they should be packed in moist sphagnum or swamp moss.

POINSETTIAS-PRIMROSES.

MR. VICK:—Will you please tell me through your MAGAZINE, how to treat my Poinsettias? Shall I cut them back? If so, how far, and when, and must I keep them in the pots through the summer? Also, are Primroses as good the second year as the first?—MRS. C. P. R., Appleton, Wis.

After flowering, Poinsettias should be cut back, allowing only two buds of the latest growth of wood to remain. The pots may then be turned down on the side in a cool place, and thus allowed to remain without water. last of May shake the dirt out of the roots and repot the plants in fresh, rich soil, and then plunge them in a border in the garden. Attend to watering and they will soon start into growth. A little manure-water may be given occasionally during the summer. From the first of September to the first of October, according to the locality, is the proper time to remove them to the house; here they will continue their growth until flowering. A temperature of 50° to 70° is proper.

Chinese Primroses are not as good the second year as the first; in fact, florists do not pretend, as a rule, to bloom them the second time, but amateurs very frequently carry them over to the second year, and sometimes longer, with results that many of them consider satisfactory. To secure the best blooms, young plants should be raised every year from seed.

FAILURE OF LILIUM CANDIDUM.

MR. VICK:-It is a great trial to me that I have no success with white Lilies, for they were favorites with my grandmother and my mother in New York, and I have pleasant childish memories of them. Mother brought some west in the year 1855, but lost them. I sent for bulbs ten years ago, but after showing they had life, the plants grew smaller. About six years ago, changing homes, I moved my Lily bulb in a flower-pot. It made some small bulbs from the scales, and then I lost sight of it. My neighbors say I cannot make it grow in this climate; one old Englishman in our town has them indoors at Easter. Seeing in the New York Tribune that the bulbs must be removed in August, I procured another bulb, and had hope for a while, for some green leaves came during the winter. A pet Jersey was, however, brought into the yard, and of course she ate them off. This spring I looked eagerly for the leaves I had protected so carefully last fall, but my mulching and Lily leaves had decayed together under the snow. A tiny bunch of leaves started up, but they are two inches high, while the Tiger and Japan Lilies beside them are in bud. Next winter I will cover with clean earth, I think, but I don't expect ever to have a Lilium candidum in an Iowa garden. Do you know whether any one in this region has had success with them ?-MRS. S. C. T., Grinnell, Iowa.

It has never been made known to us that Lilium candidum would not thrive in Iowa, and presumably it would have been, if such were the fact. Lacking positive knowledge on the subject, we think it safe, therefore, to conclude that our correspondent is in error in supposing the plant will not flourish there. Our Iowa readers can give their testimony, which, we think, will establish the fact that L. candidum can be successfully cultivated in that State. The transplanting of this particular Lily should be in August, or early in September.

ANTS DESTROYING VERBENAS.

MR. VICK:—Can you help us out of our trouble? We have what would be a fine lot of Verbenas, if the ants would let them alone. Those little pests attack the plants at the base, eat the bark away, and burrow about the roots, soon reducing the plants to a very sickly condition. Can you suggest a means of protection against this evil, without injuring the Verbenas? At the first symptoms of the trouble, I took cuttings from most of the plants, and have quite a flourishing lot of young Verbenas which, if I can guard against the ants, may yet prove our mainstay, as in former seasons. The ants, I may remark, have not disturbed any other of our plants.—A Subscriber.

A complaint of a similar depredation upon Balsams comes to us from another source. The proper thing to do in such cases is to destroy the ants. Perhaps the promptest way to do this is to take bits of coarse sponge and sprinkle fine sugar in the cavities, and place the pieces on the ground among the plants. The ants will enter the sponges in numbers, and then the pieces can be picked up and quickly dropped into hot water. Repeat the operation until the whole colony is destroyed.

PROTECTING PEACH TREES.

In the previous volume of this MAGAZINE an account and description was given of the manner of baling Peach trees at the west as a protection from cold. We learn that CHAS. PAT-TERSON, of Kirkwood, Missouri, last fall baled, or thatched, two hundred and twenty-five Peach trees with long swale grass, and, from his own report, the fruit buds on these trees were entirely destroyed, showing no difference from those left unthatched. But, as the cold last winter was unusually severe, the temperature falling to 22° below zero where this experiment was tried, this case does not decide that thatching may not ordinarily be useful; in fact, previous trials have shown that the practice is effectual, sometimes saving the buds when otherwise they would undoubtedly have been destroyed. The present test only proves that the protection is insufficient for a temperature of 22° below zero. In time we shall probably learn the true value of this method of protection.

Dodecatheon.—C. E., of Central Park, Montana, sends a good drawing of Dodecatheon Meadia, and says it is there known as the Cranebill.

REVIEW NOTES.

MR. EDITOR:—I have just got a copy of your July MAGAZINE, and what a neat, pretty and useful magazine it is. I have always felt assured that the magazine to suit the general public—the whole people—must be illustrated and in easy language. Now that I have looked it over, permit me to say a word or two with reference to what it contains:

A neighbor of mine thinks the white and red striped Salvia originated with him, but it did not. Please send him a copy of your MAGAZINE to correct his mistake. The Salvia you refer to as Hoveyii is no other than the old Mexican species, S. iantha. Of course Mr. Hovey has told me all about how one of his workmen found a curious sport on S. splendens, and from it raised Hoveyii, but there is a mistake somewhere.

You justly recommend the American Elm as a street tree. There is no more graceful or appropriate tree grown, but in regions where the canker worms prevail, as around Boston, I question the advisability of more Elms. Not only are they the sweetest food of the worms, but the annoyance to pedestrians in May is very great when passing under them—even protected trees—the worms suspended on threads get all over our heads, shoulders and clothes.

Syringa is the common American name for the shrubs that are botanically known as Philadelphus; now, as Syringa is the botanical name of the Lilac, would it not be better to familiarize the public with the name Mockorange instead of Syringa as an English name for the Philadelphuses? Besides, Mock-orange is the accepted English name for Philadelphus.

"Jenny Dare" cannot be a German or a Yankee lady either, else she would use a sickle for her grass; and think it pleasure more than labor or disgrace to spade the little plots of ground to sow her annuals in. Yes, Jenny, it would do you good to see these "Hub"-born ladies labor in their gardens, morning and evening, and point out to you with pride the work that they have done! Blush not for your "mason's trowel." I use the same in preference. You tell us of your annuals but speak not of perennials. Do you grow the latter? Why not? You miss the better jewels of the garden.

The Wild Hydrangea "A. H. B." page 206 speaks of is barely worth growing in the North. It is indigenous to the South and does well there. We have too many shrubs of sterling merit, both native and exotic, to find a place for those of second-class quality. The greatest recommendation the Southern Hydrangeas have in the North is their lateness to bloom.

To Mrs. G. J. S., page 209. I would say that kind words and love will remove John's gooseberry bushes. Cardinal flowers will grow in moist ground and an open or slightly shaded place, but they do not do well in much shade. Spring Beauty will grow anywhere if let alone, but it does not like clay or hog-wallow soil. Big rank growing ferns should do first-rate on your north-facing bank; so would little ones if looked after. By what you say regarding your other flowers, I should think you grow them in shaded over-fat soil. Grow your Sweet Williams in open sunshine, pack the soil about their roots quite firmly and put a little cut-grass or leaf-mould on the surface to keep it from baking and cracking. The same with your Carnations. If your Grass Pink refuses to bloom in open ground, raise a hillock of poorish soil and plant your Pink on the top of it, being quite sure that the exposure is unshaded.

Only six or eight inches high for a Guinea-Hen flower! Why! "Auroras" keeping in sandy earth tells rather sadly on the bulbs I fear. Begin again. In the fall buy some No. I bulbs from your florist, plant them four or five inches deep in good rich soil, leave them there year after year, do not cut over their leaves and stems till they are yellow and useless, and never practice lifting and storing your bulbs in summer, and I will expect you to add ten inches to the Guinea-Hen's stature, also blossoms in proportion. Besides being of various colors there are large and small-leaved varieties.

I used to live in Texas but knew no difficulty in growing Heliotrope there. It is exceedingly impatient of frost and of those piercing Northers so peculiar to Texas. Try it on the west side of the house, sheltered especially from the north and east, give it lots of water, but do not wet the leaves in the day time. If a Heliotrope is not worth saving from a frosty wind it is not worth owning. Young plants set out between the middle of April and the first of September, may, unless sheltered with paper or other screens, get "frizzled up," but old stumps should weather it bravely. Indeed, where Tea Roses grow easily, there also should Heliotropes, bearing in mind its tropical nature. If your correspondent would visit some of the pretty gardens of Houston, Galveston, Austin, or Victoria, the Heliotrope question would soon be settled.

Hydrangea Hortensis as a hardy plant in the northern states is useless because it is cut down to the ground every winter, and although it makes vigorous growth the succeeding summer, it is all too late to bloom.—W. F.

WHITE FLOWERS FOR WINTER.

Plants that will bloom about the winter holidays and thereafter, have a peculiar interest attached to them, and we are sure our readers will be pleased, at this time, to have their attention directed to two genera of plants, the Stevia, and the Eupatorium, that are particular-



STEVIA COMPACTA.

ly valuable for their abundant bloom at that season. These plants, alike in their general structure, belong to the great natural order, Compositæ, and have a close relationship to the Ageratum. Of the Stevias there are quite a number of species that are valuable flowering plants, blooming from the latter part of summer through the fall. Stevia compacta, to which attention is here particularly called, can



EUPATORIUM RIPARIUM.

be brought into full flower at Christmas, and by keeping some plants in reserve in a cool place, the blooming may be extended for quite a season. The small, white flowers of this plant are particularly valuable for bouquets, at the same time the umbels are so large and full as to make the plant a showy and desirable one for decoration. No directions for soil and potting are necessary, for any good potting soil and fair culture is sufficient. In window and house culture a high temperature must be guarded against, 50° to 65° should not be exceeded.

The Eupatoriums are of similar culture to the Stevias, in fact, there are many species of them that are native in all parts of this country; of these, E. ageratoides, White Snakeroot, is a very useful plant for cut-flowers and bouquets, and can be easily raised in the garden.

Eupatorium purpureum usually blooms in the early fall. E. arboreum comes later in fall, and E. elegantissimum about the holidays. E. riparium blooms later, and by proper management of the plants its flowering season may be continued from midwinter into the spring. Its beautiful white blooms are produced in great profusion, and are valuable for bouquets or vase decoration. A well-trained plant of it is a beautiful object.

NOTES FROM NEBRASKA.

MR. VICK:—Your correspondent, "J. G. S.," Western Nebraska, expresses regret at having only a northern slope for a lawn. I, too, am a Nebraskian and, if I mistake not, only a few miles removed from J. G. S., and having a lawn sloping to the north, consider that fact a great point in its favor, as it tends to shelter more tender plants from the hot south winds, which are their worst foes in this climate.

I can imagine that obnoxious Gooseberry hedge covered during the summer with "Wild Cucumber" and Maiden's Bower Clematis, both of which will thrive in shaded places, or better still, the Climbing Bitter-sweet, with its bright red berries—all these plants are natives of our timber belts.

I think Pansies might be made to thrive in the shelter of those vines, as I have only been successful with them in a sheltered place close to the north side of the house.

I think the steep bank mentioned by your correspondent would be lovely planted with woodland flowers, and a Nymphæa odorata planted in the water at the foot.

Last spring I put a slip of Elm City Fuchsia in a large pot containing an Abutilon, intending to remove it as soon as rooted, but neglected doing so, and now have a large plant clinging to the stronger stem of the Abutilon, and looking like a miniature forest-tree with its attendant vine, though I have never seen anything in a forest to equal the beauty of bloom and contrast, both in foliage and flower.—Mrs. J. J., Geneva, Neb.

MIST FLOWER.

A letter from A. H. B., of Brownsville, Tennessee, encloses a small piece of a plant with flowers, of which he says: "About four years ago, while passing through the dense forest of the Forked Deer river bottom, I observed a delicate and beautifully-tinted flower, which had so much the appearance of the Ageratum of the hot-house, with perhaps a darker purple blush, I concluded to get out of my buggy, and with pocket-knife and paper transferred some specimens from its country home to the city border, where it has, with but little attention, remained to beautify the position assigned to it. It appears to be perennial, and of the easiest cultivation. It has now been in bloom for some time, and, with a fair season of rain, will continue to present its modest and attractive clusters of bluish-purple flowers until cold weather. I intend to try it this winter in the house as a winter-bloomer. Your elegant July number came to hand, and, like the others, is a real joy to the horticulturist."

The plant here described is Conoclinium coelestinum, very closely related indeed to the Ageratum, and it is not strange that it was taken for one. It is also quite nearly allied botanically to the Eupatoriums and Stevias. It is one of our native plants that it would be well to introduce into the garden in that portion of the country where it is hardy, which is from Pennsylvania south and westward. The common name, Mist Flower, which this plant has acquired is a very significant and appropriate one, as the blue corollas are so fine and delicate as to give a fringy, misty appearance.

MATCHES FOR MANURE.

MR. VICK:-I have read the notes in your MAGAZINE concerning the use of matches for killing white worms in pots, and, although I never used them for that purpose, never having had any white worms, I was told long ago that they were good fertilizers for English Ivies, and I have used them for that plant, putting at least half a bunch, brimstone end down, into a fiveinch pot, and removing them in three or four weeks. I used the common bunch matches, not any of the patent kinds put up in boxes. I think it improved the growth of the Ivy. It would always start fresh when the matches were first put in. But I have always been so troubled with scaly-bugs that I care nothing for raising Ivies, but can recommend the matches to those who have them. I have Yucca filamentosa that has a flower stem already five feet and a half high, and is not in blossom yet. Isn't that remarkably tall?—Mrs. A. C., Leominster, Mass.

KEEPING APPLES.

The evidence is accumulating that Apples keep better in moist, or damp, cellars than in dry ones. It is probable that this may be established as a fact. It would no doubt be a blessing to most country houses, in a sanitary point of view, if their cellars were used only for small supplies of vegetables, and that they should at all times be ventilated as well as possible. Special cellars for fruit and vegetables are in use in some parts of the country. The walls rise only a foot above the surface of the ground; they are covered with a double floor, filled in between with sawdust, and over all is a roof. If room is desirable, low walls, one story above ground, can support the roof.

MILDEW OF GRAPEVINES.

There are some slight appearances at this date, July 15th, in some parts of Western New York, of mildew on the Grapevines, but not enough to cause any fear of maturing the crop, which is universally promising. It appears and increases most on the intensely hot days with a still atmosphere, and especially in gullies where the surrounding hills prevent the circulation of the air. Isabella and Concord, and similar large-leaved varieties, are the first to develop it. This affection, which, as our readers are aware, is a fungus, is best treated by sprinkling flowers of sulphur over the foliage, and the remedy is only palliative.

A HANDSOME LAWN GROUP.

The grouping of shrubs should be made with a view to their blooming in concert if possible. A beautiful group can be made with Deutzia crenata flore pleno and D. crenata flore albo pleno for the background and Spiræa Bıllardi or S. Douglasi, and Delphinium formosum in front, and Deutzia gracillis in front of all. These plants will all be in bloom at once, and the white, blue, and rose colors will set off each other to advantage; and they are just adapted to each other in height, so as to show off to the best advantage.

OUR PORTRAIT.

Many readers sent for our portrait to bind in the MAGAZINE of last year, and new subscribers are occasionally writing for them. This demand is not, of course, in consequence of its great beauty, though it might have been, had the artists done justice to the original. As it is, however, we thought it well to present it to all subscribers in our Midsummer number. Those who do not wish it to bind in the MAGAZINE can give it to the children to play with. The children all like us.

THE MOCK ORANGE.

No collection of hardy shrubs would be complete without the Mock Orange, or Syringa, Philadelphus coronarius. Its beauty and fragrance make it a universal favorite, and it is celebrated in song and story, and enshrined in our pleasantest memories. It is said to be a native of Southern Europe, and has long been in cultivation. It grows to a height of eight or ten feet, and in midspring presents a mass of white flowers whose fragrance rivals that of the Orange blossom, to which it is likened.

There are several species of Philadelphus native of this country, some of which are in cultivation. One of these is P. grandiflorus,



PHILADELPHUS CORONARIUS.

bearing quite large, showy, white flowers, but without fragrance. P. Gordonianus, a species from Oregon, is a vigorous grower and abundant bloomer; the flowers are only slightly fragrant, but it is desirable on account of flowering ten days or a fortnight later than the common Mock Orange, thus lengthening the season.

There is a variety of P. coronarius with partially double flowers, and another one, called the dwarf Syringa, that grows low and bushy, adapting it to situations that would be unsuited to the large-growing kinds.

These plants are hardy in all parts of the country, standing our severest winters. They require no particular kind of soil, but will adapt themselves to almost any place where a Currant bush will grow.

THE MESQUIT BEAN.

MR. VICK:—In your last MONTHLY for July, A. K., of Toronto, Ontario, seems dreadfully troubled about the killing of a horse by the Mesquit Bean. This burden from his conscience he can remove at once, as I can assure him the horse never died from the effects of the beans; having just arrived from Texas I can furnish A. K. with all the information he requires. He, evidently, from the tone of his letter, takes it for a garden bean the same as our bush beans, but it grows on a small tree which has the appearance of a peach tree, and would easily be taken for a peach orchard by a. stranger riding through the prairie, from the appearance of the trees and color of the foliage. These Mesquit bushes bear a heavy crop of beans enclosed in a pod from four to eight inches in length; the beans are separated in the pod by a thick pulp, and when ripe and dry they are full of saccharine matter very rich and extremely nutritious. Cattle, horses and sheep are very fond of them, they eat them with avidity and enjoy them exceedingly. They are admirable for fattening, and there is no other food in the world that is better for the milch cow, producing an abundant flow of milk of the richest and sweetest sort; it is one of the greatest. blessings in Texas. The Mexicans sometimes use the beans for human food, pounding them and making a sort of bread of them. I have eaten them in various ways, but cannot say I either admire or like them, their peculiar faintly sweetish taste is not attractive, nutritious asthey undoubtedly are. A great peculiarity about them is this: in seasons of much moisture, when Mesquit grass is rank and rich, the Mesquit trees yield hardly any beans at all, on the principle, apparently, that they are not then needed; but in seasons of drouth, when the grasses are parched and poor, then the Mesquit trees are invariably loaded with an enormous crop; it is also strange that wherever the Mesquit trees grow on the prairies, the Mesquit grass always abounds and accompanies the treesor "chapparal," as called in southwestern Texas. The "Curly Mesquit," Texas herdsmen contend is superior to corn for food.—H. J., Goderich, Ontario.

THE IVY IN THE HOUSE.

MR. VICK:—Does the Ivy require any special treatment? I tried one for the first time in the house last winter. It did not do well, and by April every leaf had fallen off. It was not troubled by frost. Which do you consider the best kind for house culture?—R. F. B., Kingston, Ont.

The English Ivy, with ordinary care, succeeds perfectly as a house-plant. Keep it clean by sponging the leaves frequently.



LEGEND OF CLIANTHUS PUNICEUS.

Some of our young readers have seen the "Glory Pea" or "Sturt's Pea of the Desert," which is Clianthus Dampieri, and they know it is wondrously beautiful. It is a native of Australia.

Another species of Clianthus, originally found in New Zealand, is equally admired; this is C. Puniceus and is called by the natives, Kowai, and by the English residents Parrot's-bill Kowai.

The natives in their admiration of the wondrous beauty of the flowers of this plant have associated with it a highly imaginative legend.

Such is the wonderful legend of the crimson Bird's-beak, Kowai. "Long, long ago, only a summer after the coming of our people from far Hawike, while yet there were few of the sons of Great Mani in the land, and while these few went in and out of their 'whares' with silent feet and quiet voices, dreading the horrible wild men who dwelt up in the woods, the Maeroes and Ngatimamoes-men with long, claw-like talons, and sharp, cruel teeth, rending and tearing human flesh as birds their prey. Long ago, in that far-off summer time, there flew out from the hand of some god a glorious bird. Heavenly, with the brightness of the day, crimsoned with the strong, fire-like crimson of the drooping Kohia, and the manyberried Karawas, and the flaming Petoki, the bird God-sent flashed like a living fire in the summer sun. Friends! our eyes have never beheld such a bird, one God-made, God-sent, flashing like fire from tree to tree, singing a low, sweet song, drawing the weary, fearful men and their brown-eyed women from the 'whares;' bewitching them onward, maddening them with hot desire for only a glimpse of the fluttering scarlet wings with their long feathers, the snow-white, graceful head, with its shining crimson beak. Friends! the sun smote hot on the heads of those who followed the bird, brambles tore them, boughs bruised and wounded them, but fear never came into the hearts that were spirit-guided by the crimson

bird which flew before them. Now he sung upon a wreath of white Piki Kiarero, now amid the rain of white petals fell one of his crimson feathers. On and on, singing a low melodious spirit-song, drawing the souls of them that followed on and ever on; through the long hours, feeling neither care nor pain, the patient ones journeyed, and this God-bird's mission ended when, through many a long, untrodden path. by many a smiling stream, by raupo swamps, by steep ascents and deep ravines, they, who had followed with never a fear and never a faltering, came upon a kianga fairer even than the lost shores of Hawike; and here they remained. And with them, flitting out through the summer on the long hot days, singing low as the 'whares' were made, and peace and rest grew in the hearts of the Maories—was the crimson God-bird. Unlike the old seaside kianga from whence the bird led them, no sandy wastes rolling one beyond another like piled cloud banks on a grey day—unlike the old kianga, here were berries unnumbered; here were gliding eels in the broad stream winding among the woods; here were hordes of fat, black-eyed 'kioris' waiting for our ancestors to snare. In the new kianga, guarded by the wonderful bird, swiftly and marvellously the people increased; no longer they moaned for far Hawike; no longer were they afraid and trembling as leaves when the dread south wind drives them and tears them with its fierce hands as a cruel warrior his enemies.

"But when the cold winds came, and far off the surges beat all dismally on the shore in angry crests, when frost bound the earth and hid away the grass and moss, then the red bird was not seen for many days. Behold, friends! among its soft feathers the bitter wind came all sharp and chilling; the crimson bird fashioned a wonderful, a mighty prayer to his 'Atna,' and besought him to turn his God-bird, his faithful messenger, into a new shape, keeping his glorious color of blood-red crimson only, as a sign of his true faith and service. And lo! one morning, without the pa stood a small low tree;

green were the leaves as the fairest, clearest 'Ponamu,' dense and heavy its long feathered boughs, and about it lay a scarlet feather or two, and on the green stems beneath the leaves hung little green buds in long pendant tassels. Then the sons of Mani knew that the God-bird was gone from them into this new tree—gone, yet returned again to be their guardian and 'Atna' once more.

"From the feathers lying there on the sodden ground sprang those scarlet fungi that gleam among the dead leaves in winter. And lo! in time upon the little tenderly guarded tree came from those small green buds great

ing and perceiving. Upon the retina of the eye an image is formed of whatever is before it, and it makes no difference what eye it is, whether human, or eye of bird, or beast, the little pictures are formed there; but the effect produced upon the mind we expect to be far different in the case of an intelligent man or woman, boy or girl, than that of an ox or a horse. And how great this difference will be depends upon the development of the mind. Children are born with more fully developed intellects than even the most intelligent of other animals; still, the measure of their capacity depends upon the training they receive, and



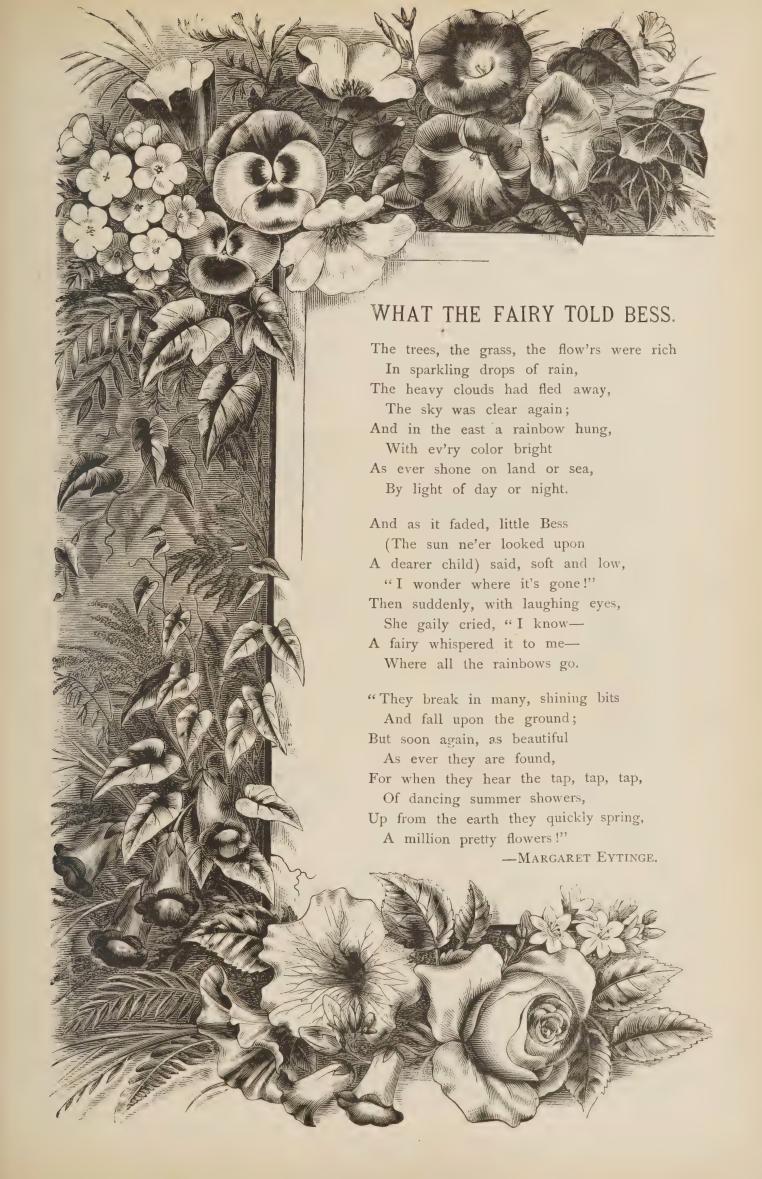
A RURAL WATER SCENE.

hanging clusters of crimson kowai flowers; god-like, gorgeous, god-tinted; crimson beak and snowy throat, the great spirit guide came back in very truth and form of old remembrance—the kowai, the bird's beak!"

WHAT DID YOU SEE?

Many of our young readers will probably soon start out for a summer journey or vacation, and some, probably, are already enjoying this leisure season that has been anticipated for many months.

On returning home the inquiry will be made from many lips, "What did you see?" Now, the good Book tells of those that have eyes but see not; so, there is a difference between seethat, too, in proportion as they are self-trained and self-governed. When, therefore, we hear the question asked, "What did you see?" we can, in a certain sense, answer it. Not that we can know all the scenes that have been passed through, not that we have received an impression of all the objects that have been painted on the retina, but we know that we really see only what we can mentally perceive. How many beautiful landscapes, like that here presented, may our eyes rest upon? Are we prepared by self-training in the perception of the beautiful to appreciate and enjoy the variety and motion of the clouds, the shadows in the water, the expressions of majesty and strength, grace and beauty in the trees, smaller plants and flowers?



LITTLE NELL AND THE FAIRIES.

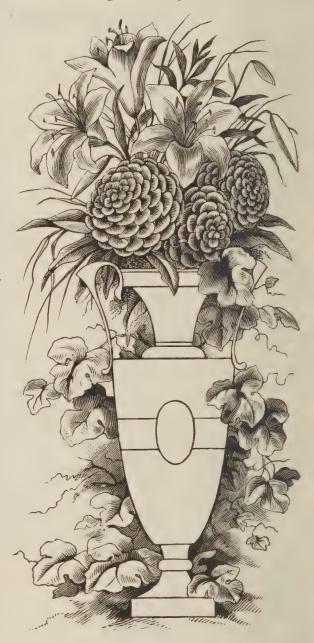
Nellie had just returned home from a very busy day's work in the muddy streets of New York, for our little heroine was a flower girl, and earned a few pennies by selling bouquets in the busy thoroughfares of the great city; she was also papa's housekeeper, her mother having died years ago; but the pleasant memories of a sweet face that caressed and kissed her in her baby days, and the love that Nellie had for the beautiful flowers, would somehow get associated in her mind, so that her thoughts of mother was of one who had passed over to the perpetual land of sunshine, where

"Everlasting spring abides,
And never-withering flowers."

To-night, however, she felt very sad, for, although she had done splendidly with her sales, and the people bought very freely, from the tiny ten-cent button-hole bouquet up to the largest bouquet Nellie could furnish, yet she could not but feel that nearly all of these were intended as a loving surprise to some one, and then she remembered that she had neither brother nor sister, not even a cousin nor an aunt as far as she knew, to give her presents or surprises; none but father, and then-well, papa was real good, even if he wasn't rich; she knew he loved his little Nell and would spend a fortune to please her if he had it. "Yes, indeed," said Nellie aloud, as she set about getting father's supper ready, "yes, indeed, papa would just buy me everything he could think of, and give me a surprise every Christmas and New Years, and birthdays and all sorts, if he was only able to."

Nellie's father was one of those unfortunate men that always seemed to be doing something without ever accomplishing anything; you know children, there are people of that kind who are always busy and yet they never make their mark-never get on in the world. Why is it, think you? Certainly not idleness; some would call it "bad luck," others say they haven't "got the knack of doing things. Well, Nellie's father was such a person, quiet, industrious, obscure, that nobody noticed, and that never forced himself into anybody's notice, unless it was by some of his unfortunate moves or mishaps, that only elicited the pity and perhaps the censure of some that knew him. But he thought the world of his little Nell, as he called her, the only one, indeed, left to him now, and though they were very poor they tried to be very happy in each others love.

Nellie had been preparing supper, and now the table is set and the kettle steaming on the side of the stove, and papa has not yet come. Feeling lonesome she takes up her magazinean odd number by the way—that the old newspaper man on the corner gave her a week ago. There is a story in it about some children and the fairies, and soon our little maiden is deeply absorbed, and, in fact, almost without knowing it, she becomes one of the party; it does seem so funny, but Nellie knows it is her very self, for she has got her flower basket with her and is actually selling her bouquets to the fairies!



Just think of it, selling bouquets to fairies! Now, whatever could fairies want with bouquets? That's just what our little flower girl thought, and strange enough, as the fairies tripped away with the bouquets, Nellie's eyes seemed to follow them, for in this fairyland people could get from place to place in a twinkling and they were able to see almost anywhere they wanted to, it was always so bright and sunny, and "there was no night there."

"I want," said one charming nymph whose name was Amy, "I want some Oak-leaved Geraniums as a token of true friendship; lavender and Pansies for loving remembrance; Blue-bells for constancy; and a few sprays of Arbor Vitæ, by way of signature—your friend till death."

Nellie's nimble fingers deftly set the desired flowers and trimmings together with such good taste that the fairy smiled at their beautiful arrangement and then sped away in a great flutter of delight to bestow them upon one who through many tried years had proved herself worthy such grateful remembrance.

"And may it please you, Miss Nellie," said another merry little fairy, with a roguish twinkle in her dark brown eyes, "we are to have a birthday party and social time generally at the old homestead, and I have been made a committee of one to furnish flowers, so I want you to help me out. Let me see—for the table we must have in the center vase, Dahlias for elegance and dignity, White Lilies for purity and sweetness, with a festooning of wild grape vines, for these qualities are not complete without charity. For the upper vase, standing near "mine host," we can use red and white Chrysanthemums, for they speak of love and truth; Cinerarias are always delightful, and Calliopsis always cheerful, therefore they may very properly be added, and for green trimming some sprays of Parsley is befitting this festive entertainment. Now, the lower vase will stand in front of Cousin Sam, the accepted punster of the evening, so we must fill it with Gardenias and Gillias, for cheerfulness and sociability; Scarlet Lychnis for wit, and some sprigs of Holly for domestic happiness; that's something Charlie don't know anything about, for he's an incorrigible batch. Heigho! well now, the next thing in order is the corner of the mantelpiece, for which a few Callas will be proper, because of their magnificent beauty; some Tea Roses, for they are always lovely; Collinsias to represent the domestic virtues, with flowers of the Mimulus thrown in by way of fun, finished off with trimmings of Fern and Smilax for their fascinating loveliness. Over the hall door we must hang sprays of Oak for hospitality, flowers of the Wistaria for welcome, and tendrils of Ivy, bespeaking friendship and fidelity."

By this time Nellie was overwhelmed. At last, when she did venture to speak, she said timidly:

"If you please Miss—Miss—I don't begin to have half the flowers you call for, but I can order them at once."

"O! no trouble about that," said the fairy with the roguish twinkle in her eyes, "It is very convenient you know, dear, to have the gentlemen wait on us poor girls and anticipate our wishes," when, lo! there instantly appeared a

queer little man in a curiously checkered suit and black mask. "This," said the fairy to Nellie confidentially, "is my particular friend, Mr. Jack Harlequin."

"Presto!" said he, touching Nellie's half empty basket with his golden wand, when out tumbled the desired flowers in rich abundance.

Poor Nellie! she had never dreamed of anything like this before, and it was a full minute before she recovered from her bewilderment. The arrival of a new customer, however, called our heroine to the work before her, so the bouquets were finished in a truly tasteful manner,



and she had the satisfaction of seeing the darkeyed fairy and her particular friend go trooping off together in high glee, under an avalanche of bouquets.

The new customer was a nice looking young man and bashful; he thought he wanted—wanted a—some flowers.

- "Very good," said Nellie, "have you any preference?"
 - "Y-yes, give me some of that, please."
 - "Which?"
- "Pref—I am yours," stammered the youth, blushing scarlet.

"I think not," said Nellie innocently, "you don't belong to me, I never owned anybody nor anything, only papa, and Tabby and a rag doll."

"I mean the flowers expressing this sentiment—this gone feeling—Peach blossoms, you know," said the young man quickly.

"Oh!" said Nellie, "I'm sorry, but you are too late, Peach blossoms are out of season. Haven't I got other flowers here that will suit as well? This she said with such winsome grace, that the bashful young man recovered

his self-possession, and, without further ado, told Nellie he wanted a lover's bouquet, that should tell its own story.

"That's just what I think, Brother Charles," said a laughing, blue-eyed nymph, "for you will never be able to tell it yourself."

"Why, Sister May! what brings you here?"

"Flowers, sweet flowers," said the new comer, "I too want a bouquet, but I think, Charlie, we had better help you out first, so if Miss Nellie will please use her good taste in making up the bouquet, we can select the flowers."

So with this division of labor, the trio set to work in real earnest.

"We must honor 'my lady love' with Tuberose buds and Humea elegans, in acknowledgement of her personal charms, elegance and dignity," said May.

"And throw in some Red Roses for love," said Charlie.

"Moss rosebuds and Forget-me-nots will make a better confession of true love, my brother; then there is Heliotrope, you know, which speaks of devotion, and as this is a birthday occasion, it will be very proper to express our best wishes with a goodly handful of Speedwell."

"With here and there a spray of Kenilworth Ivy," said Charlie, still anxious to be remembered by his fair charmer.

As these flowers and trimmings were being mentioned, little Nell busied herself in their tasteful arrangement, and when the bouquet received the finishing touch it was handed over to the admiring youth, who was too much engrossed with his own happiness to think of waiting for his sister May.

"And it is just as well," said May, as she watched her brother depart with his precious gift, "there's a heap of trouble on the poor boy's mind, without his thinking of me. "Now, Nellie," she continued, "I want a 'go by' bouquet for Mr. Jones, please."

"And what may that be?" inquired Nellie, with some amazement.

"Oh, a gentle reminder that his company isn't wanted, and the reasons why, that is all," said May, with a saucy toss of the head, and for that purpose I shall need some London



Pride, Celosia and Yellow Chrysanthemums, and if Mr. Jones knows anything about the voices of the flowers, they will say to him plainly, 'you are frivolous, you are a fop, and your love is slighted,' and lest this dreadful news should break his little heart, we had better add a few sprays of Cranberry as a cure for the heartache."

"And now I have a mission of a far different nature to perform," and as the fairy said this there was a marked change in her demeanor, the clear blue eyes wore an expression of great tenderness and sympathy, and the voice, always full of melody, was now kindly and reverential, so that if Nellie had imagined this blue-eyed nymph transformed into an angel of mercy, she would have been about right, for indeed this merry-hearted fairy was thoughtful for the comfort of those who were less favored in life than most of us. Many a time has her smiling face and cheery voice carried sunshine into the homes of the friendless, and anxiously looked for and heartily welcome have been her visits to

the sick room, bearing with her the customary bouquet, with other dainties of a more substantial character; and pleasantly enough the otherwise long weary hours have slipped away, as Fairy May chatted about the flowers and their wonderful meanings, and of the great Being who created so much loveliness for our enjoyment, and interesting indeed were the moments as she would turn from these things to her little bible and read in her simple, trustful way, the beautiful lessons it contained, particularly those found in the sayings and life of Jesus. And so we are not surprised to find this thoughtful fairy engaging the remainder of Nellie's flowers for these very purposes, these missions of love and mercy.

"You see, Nellie dear," said May, after this missionary work had been talked over, "most of the little sufferers never owned a garden, or even a solitary plant, and a nice bouquet will sometimes give them more health and happiness than a whole week's—

"Well, my little Nell!" said her father, as he entered the room and found his little daughter and Tabby napping, side by side on the settee.



Nellie opened her eyes very wide to look at him, and wondered how he ever got in without her hearing his footsteps on the stairs. Old Tabby, too, was wide awake at the sound of the familiar voice, and began scratching his left ear vigorously, while the kettle still sputtered away on the side of the stove at a great rate, as though it was equally glad at the appearance of things generally, and of Nellie and her father in particular, for by this time our little heroine had given papa his welcome kiss, and they were both preparing to partake of the frugal meal.

After asking a blessing, Nellie waited on her father like a little woman, and all the while her

face was lit up with a smile of quiet happiness and contentment.

"Now, Nellie," said father, observing her pleasant mood, "you seem to be highly pleased with your thoughts. What wonderful thing have you seen or discovered to-day that makes you look so good, and why may papa not know the secret and be made happy too?"

With this kindly request our little heroine readily complied, and told father all about her dealings with the fairies, to which he simply said, "wonderful! wonderful!!" "So you see, dear papa," continued Nellie, "I learned that flowers are not only beautiful, but they can talk, and in their way express our thoughts and feelings, so that when presented to our friends, or used to adorn the sick room, or are displayed on the sacred altar, they are constant reminders of love, sympathy and purity. I have learned too that even a poor little flower girl can be of use in this big world, and that one of the best ways to be happy is to be helping to make others happy, for while the good fairies carried the emblems of love and mercy to the brown stone house, or the poor man's cottage, you must remember, dear papa, it was your own little Nell who had the honor of furnishing the beautiful bouquets."

"My little Nell talks very wisely," said the father, "and it makes me happy, too, to know you can find consolation and pleasure in your daily toil. I think darling the fairies have been teaching us the true mission of the flowers."—UNCLE JOHN.

A TWILIGHT ENCOUNTER.

One eve a hungry toad Was hopping in the grass, Along a lonely road Where children seldom pass. A weary tumble-bug, Belated by his toil, Was trying home to lug His precious lump of soil. A cricket, on the jump, Dropped down upon the toad, And said, "That heavy lump For you would be no load; Your ugly back is strong And handy as a shelf, Just take them both along, And I will ride myself. "O, no, I guess you'll not," Sir toadie answered back, And started on a trot, Along the dusky track.

But the angry toad, finding that the cricket still retained his position, suddenly halted and told him to use his own jumpers, or provide himself with a coach of his own; for that he and a great number of toads were going to spend the night in a poor man's garden, to rid it of the insects that were about to distroy it, and he

wouldn't be seen carrying such a worthless load.

"Worthless, indeed!" retorted the cricket, "I'd like to see you get rid of me; you can't do it."

Then over toadie flopped
His back into the dust;
And off the cricket hopped,
Because he found he must,
And piped a bitter wail,
Of how he'd had "a bid"
To sing a little tale,
And rival katydid.
And that a little maid
Would wonder at her gate,
Because her minstrel staid
And left her there to wait.

By this time the beetle with his ball of earth came in sight, and the toad, being now in a better humor, concluded to give him a lift on his journey. So the beetle mounted, and clasping his load securely, they were about starting off, when a sly serpent, which had been hungrily watching the toad, slid from under a bush

And seized the hapless toad,
And held him by the toes;
But beetle dropped his load
And pinched the serpent's nose.

And there he held and stuck until it was a sight; indeed, he showed a pluck that certainly meant fight. This pinching process proved so torturing, that the snake was glad to release the toad to relieve himself of pain. Then the beetle remounted and was soon at his journey's end. The toad spent the night happily in the garden doing good. The cricket found a perch on the gate-post, and sang in his little girl's ear until he was hoarse. So everything was lovely at last, except that a katydid, in a tree by the gate, looked down upon the sweet, little girl and the proud cricket, and turned quite pale with envy, and died before morning with grief. -" PROXY."

THE FAIREST FLOWER.—While we cultivate flowers, let us remember to cultivate that most beautiful flower, brotherly love, by giving away to the sick and the sad ones a share of all our flowers, at all seasons. Only by such ministrations may we faintly realize a paradise regained.

CULTIVATED GRASSES IN KANSAS.

The State Board of Agriculture of Kansas has just issued its second biennial report, and whoever wishes to know about the agriculture of Kansas should consult it, Colored maps of the counties, statistics and reliable essays, give full information in regard to that growing Western State.

In reference to the grasses, a writer on that subject says: "I have no hesitation in recom-

mending the following sorts, placing them in the order of their importance: Orchard grass, Alfalfa, red clover, Perennial rye-grass (English blue-grass). For mowing purposes, our experience has shown, very steadily, that Alfalfa, red clover, Perennial rye-grass and Timothy are the best.

NEW PUBLICATIONS.

How to use the Microscope. By John Phin, Editor of the American Journal of Microscopy. New York: Industrial Publication Co. Pp. 230; 75 cents.

The third edition of this excellent little manual has recently appeared. Some very valuable additions have been made to the matter in its different parts, thus presenting the most modern ideas, and embodying much of the experience of many years in microscopical work. Beginners in the use of the microscope, as well as those more advanced, will find it constantly useful, and they should have it always at hand.

Report of the Michigan State Horticultural Society for the year 1880. By Charles W. Garfield, Secretary. Pp 600; Lansing, Mich.

This volume contains a great amount of valuable matter for the farmers, fruit cultivators and general horticulturists, both professional and amateur, for the State of Michigan, and much that is of interest to horticulturists generally. A special feature of this volume is the catalogue of the flora of Michigan, with valuable notes. The society has taken up the idea of improving and beautifying the grounds of public schools by planting trees and shrubs and cultivating flowering plants. The enthusiasm manifested on this subject is an indication of the final achievement of good results. The latest advances in fruit-culture are faithfully and ably presented.

The Garden Annual, 1881. Published under the direction of W. Robinson, F. L. S. London, England.

A valuable manual for English gardeners, and to many in this country, being a complete directory of the horticultural trade generally, and of the principal garden and country seats in the United Kingdom, and of the horticultural and botanical societies. It contains hints for work to be done each month, a list of most of the new plants introduced the last year, and tables of all kinds useful to the gardener. Its cost is only one shilling sterling.

Talks About Flowers, by Mrs. M. D. Welcome, of Yarmouth, Maine, consists of one hundred and fifty pages in relation to ornamental plants, being partly personal experience and partly gleanings from various horticultural sources, with some poetry and sentiment. We also acknowledge from the same author the receipt of a small pamphlet, entitled An Essay on Roses.





GROUP OF CINERARIAS.